Contents for April

Illustrations.

Influence of Packing, Case Lining and Transport on Bruising in Apples (3 illustrations) 208, 9
Mr. G. W. Brown 175

Subjects.

Answers to Correspondents 216
Apple and Pear Shipments, Report on 211
Apple Export Case 210
Apple Export Industry 177
Apple Sales Board in W.A. 201
Arsenical Residue on Apples, Removal of 188
Australian Fruit in U.K. 210
Banana Plantations, Weed Control 205
Banana Thrips 193
Berry Growers' Conference 183
British Fruit Trade 186
Cancellation of Shipping Space 212
Canned Fruit Tragedy 179
Canned Fruits Export 212
Captain Cook's Cottage 186
Cider Making 216
Citrus in California 191
Citrus News and Notes 185, 189-193
Codlin Moth 186
Collection of Claims 177
Commonwealth Propaganda 178
Cool Storage 181, 195-7, 215
Drainage in Mildura District 184
Dried Fruits 199-200
Editorial 175-177
Export News and Notes 210
Fertilizers for Orchard and Garden 186
Fruit Crops in N.S.W. 205
Glasgow, Trade with 210, 211
Grapes 197
Harmony and Goodwill 175
"Hobson's Bay" Case 175
Illegal Sale of Dried Fruits 199
Imperial Fruit Show, Bristol 186
Influence of Packing, Case Lining and Transport on Bruising in Apples (illus.) 208-9
It is Time this Nonsense Ceased 177
Liming Orchard Lands 203
Market Notes and Prices 218-223
Mid Murray Notes 206-7
Mushroom Growing 213
Mussel Scale 216
New Export Apple Box 211
New South Wales 189-191, 205-6, 219
N.S.W. Attacks Victoria 175
N.S.W. Citrus Crop 189-191
New Zealand 198
Orange Exports to U.K. 191-3
Orchard Sanitation and Fireblight 198
Overseas Fruit Markets 212
Passionfruit, Brown Spot Control 202
Peaches in N.S.W. 205
Pear Export 212
Pear Export Case 210
Personal 187
Pineapple Disease Investigations 187
Plums and Peaches on Apricots ? 216
Queensland 181, 193, 207, 219
Queensland Citrus Crop 193
Refurnishing Fruit Trees 203
Rice Growing in Australia 181
Scald in Granny Smith Apples 215
Selected Buds for Citrus 193
Shipowners' Liability 177, 179
South Australia 193, 199, 206, 211, 214-5
Sth. Australian Fruit Marketing Assocn. 214-5
Spraying Stone Fruits 223
Spray Residue Removal 197
Sydney Royal Show 216
Tasmania 195, 203, 211
Tasmanian Fruit Shipments 211
U.S.A. Notes 191, 202
Victoria 182-186, 210, 219, 223
Victorian Fruit Crops 184-5
Victorian Fruit Export 210, 223
Victorian Fruit Marketing Assn. Defended 175
Vine Culture 205
Wastage in Stored Tasmanian Apples 195-7
Western Australia 201, 202, 215, 222

INDEX TO ADVERTISERS.

Canning Machines—

Austral Otis Andebar Cannery Equipment Pty Ltd., South Melbourne, p. 172.

Cold Storage—

Bender & Co., Launceston, Tas., cover ii.
Dangar, Gedye & Co. Ltd., p . 202.

Fruit Buyers—

Brooke, C. M., & Sons, S. Melb., p. 221.

Fruit Tree Suppliers—

Brunning, John, & Sons, Somerville, p. 212.
Nobelius, C. A., & Sons, Emerald, Vic., p. 196.
Goodman, C. J., Picnic Point Nurseries, Bairnsdale, p. 207.
Rosen, L. P., & Son, Carlingford, N.S.W., p. 186.

Fruit Graders—

"Lightning," Lightning Fruit Grader Co., 517 Albion-street, W. Brunswick, N.12, Vic., front cover.

Manures, Fertilisers, &c.—

Sulphate of Ammonia, Nitrogen Fertilisers Pty. Ltd., Melb., p. 200.

Orchard Implements—

Harvey, D., Box Hill, p. 214.
Howard Auto-Cultivators Ltd., Sydney, p. 213.

Patent Attorney—

U'Ren, Geo. A., Melbourne, p. 221.

Refrigerating Machinery—

Werner, R., & Co. Pty. Ltd., Richmond, cover iii.

Spray Materials—

"Black Leaf 40," Tobacco By-Products and Chemical Corp, p. 198.
"Blue Bell" Arsenate of Lead, Lime, Sulphur, etc., Blyth Chemicals Ltd., Elsternwick, V., p. 169.
"Cooper" Sprays, William Cooper & Nephews (Aust.) Ltd., Sydney, and agents, back outside cover.
"Elephant" Brand, Jaques Pty. Ltd., Burnley, V., p. 169.
"Gargoyle" Spraying Oil, Vacuum Oil Co. Pty. Ltd., Melbourne, p. 176.
"Ici" Winter Washes, — Imperial Chemical Industries, p. 171.
Lion Brand, Orchard Sprays Pty. Ltd., 549 Church-street, Richmond, p. 172.
"Neptune" Spraying Oils, Neptune Oil Co. Ltd., Richmond, Vic., and all States, p. 174.
"Plane" Brand, Chemical Dusts, N. N. McLean Pty. Ltd., Melbourne, p. 220.
"Vallo," Victor Leggo and Farmers Ltd., Melb., p. 180.

Spray Pumps and Guns—

Cameron, Sutherland & Seward Pty. Ltd., Sth. Melb., p. 184.
Russell & Co., Box Hill, p. 179

Strapping Fruit Cases—

Gerrard Wire Tying Machines Co. Pty. Ltd., W. Melb. p. 183, 211.
Python Wire Strapping, p. 188.

Transport—

Associated Steamship Owners, Melbourne, p. 180.
Port of Hull, p. 171.

Tree Bands—

Victor Leggo & Farmers Ltd., Melbourne, p. 180.

Tree and Stump Pullers—

Trewhella Bros., Trentham, p. 204.
"Digger" Quick Manufacturing Co., Stumping Jacks, etc., p. 196.

The

Safest Spraying Oil

The intense refining process to which NEPTUNE WHITE SPRAYING OIL is subjected, whilst imparting the correct rate of volatility that ensures a continuity of toxic film for a very long period, and the right viscosity that permits of easy spraying, entirely eliminates the harmful elements found in ordinary spraying oils.

For clean fruit and healthy trees, use NEPTUNE WHITE SPRAYING OIL and spray at the strengths stated in our booklet, "Neptune White Spraying Oil"—*Free*—on application.

NEPTUNE
WHITE SPRAYING OIL

NEPTUNE OIL COMPANY LIMITED: ALL STATES.

EDITORIAL

The "Hobsons Bay" Case.

UNQUESTIONABLY the most important event which has been before the Australian export industry for some years is that of the appeal in the "Hobson's Bay" case, which is reported in this issue. Summed up, if fruit is delivered in sound condition on board ship the liability is on the shipowners to carry it safely and deliver in good condition at the port of destination. No longer can the shipping companies raise the plea of inherent vice in the fruit as in the "Northumberland" case, should a cargo be carried unsuccessfully.

Messrs. White & Son Ltd. have earned unstinted praise from the fruit industries of Australia and New Zealand. Their claim for damage in the "Hobson's Bay" case amounted to about £100, but the firm risked no less than about £5,000 in legal costs to contest their claim. They won their case, but the shipping company concerned appealed, and the appeal was dismissed. The full context of the judgment has been circulated by the Departments of Agriculture to growers throughout Australia.

Not only did Messrs. White & Son recover their claim for damaged fruit, but 1/3 per case compensation was paid on all claims. All the more credit is due to Messrs. White & Son Ltd., as it is understood they carried on the legal fight single-handed and in doing so they have rendered service of untold value to the fruit industry of Australia and New Zealand.

HARMONY AND GOODWILL.

AT no time in the history of the Australian fruit industry was there a greater need for unity and goodwill.

It is the privilege of people in a free country to hold divergent views and to express the same.

However, the urgent necessity to-day is to find a common ground on which all men of goodwill can meet.

There are many major matters of principle affecting the fruit industry on which producers and distributors are agreed. By means of effective team work, important improvements are possible.

These are big days of world reconstruction and a wide vision is necessary.

We can afford to dispense with non-essentials so as to get to work on a constructive programme.

The vigor which characterises several of the articles in this month's "Fruit World" will be continued, and matters affecting the industry will be reviewed impartially.

N.S.W. Attacks Victoria

A SYDNEY monthly paper, claiming to be the "official" organ of the N.S.W. Fruitgrowers' Federation, published in its issue of March 24, an article in black type entitled: "What is Wrong With the V.F.M.A.?" and stating the Association is in bad odor, quoting in support the opinions of Mr. E. H. Hatfield, President of the Orchardists and Cool Stores' Association of Victoria. The article is highly provocative and misleading. * * * * *

The question is being asked: Did the Orchardists and Fruit Cool Stores' Association authorise Mr. Hatfield to write in this strain? It would be of value if the conference of this Association on May 14 would express itself on this point. * * * * *

Possibly when all the problems of the fruit industry in N.S.W. are amicably settled it will be time enough for our Sydney friends to help Victoria, especially with some constructive ideas.

The best answer to the question: "What is Wrong With the V.F.M.A.?" is to quote from a circular issued to growers by the esteemed president, Mr. G. W. Brown, just before he sailed for England to represent the Australian Apple and Pear Export Council at the Empire Producers' Conference.

Mr. Brown's Statement.

The V.F.M.A. has proved of real value to growers, who have been saved in cash many times the amount of levy contributed. Some of the successful activities which we have initiated or taken part in are:—Improved handling of fruit during loading; elimination of duty on crude oil for spraying; removal of Sales Tax on fruit wrapping paper, spraying materials and other items; reduction on freight to N.Z. (prior to the embargo); retention of Prof. Wadham in Victoria; hail insurance can now be effected; saving of £500 by having eliminated the "quarantine" charge on imported case timber; saving of £3,500 in securing removal of primage on fruit wrapping paper; formation of Thrips Investigation League, etc.

Mr. G. W. Brown.

The V.F.M.A. took the initiative in calling the Interstate Conference which led to the formation of the Australian Apple and Pear Export Council.

The V.F.M.A. is honored in having one of its executive members, Mr. J. B. Mills, as President of the Australian Apple and Pear Export Council, he being appointed also to attend the Empire Economic Conference at Ottawa. At this conference, Empire Apples and Pears were granted a British preferential tariff of 4/6 per cwt.

We are co-operating with the Apple Gift Scheme for 1934.

The V.F.M.A. enjoys the confidence not only of its membership, but also the State and Federal Governments. Any requests made by the Association receive prompt and careful attention.

Research Committee.—Grower members of the Executive have formed themselves into a Research Committee. Field Days in several orchard districts have proved decidedly beneficial.

A circular giving valued cultural hints was sent to members and greatly appreciated. We are assisting in the utilisation of waste fruit in by-products, cider manufacture, etc.

A representative Pear Committee has been formed, and all matters relating to Pear export will come under the review of this Committee.

* * * * *

On Sound Lines.

That the V.F.M.A. is built on sound lines is evidenced that its form of constitution has been followed in South Australia and N.S.W.: it is noted with appreciation in the other States.

Apple and Pear growers do not appear generally to be aware of the fact that the highly successful Australian Dried Fruits' Association is built on representation by growers and traders and is a voluntary organisation.

The report of the Apple Sales Board in W.A., published in this issue, showing the successful activities of growers and traders, points the way to similar successes in the other States.

* * * * *

N.S.W. fruitgrowers expressed pleasure at their last Conference to have in attendance the Secretary of the V.F.M.A. when the constitution of the N.S.W. Apple and Pear Export Association was decided upon—which constitution is built largely upon that of the V.F.M.A.

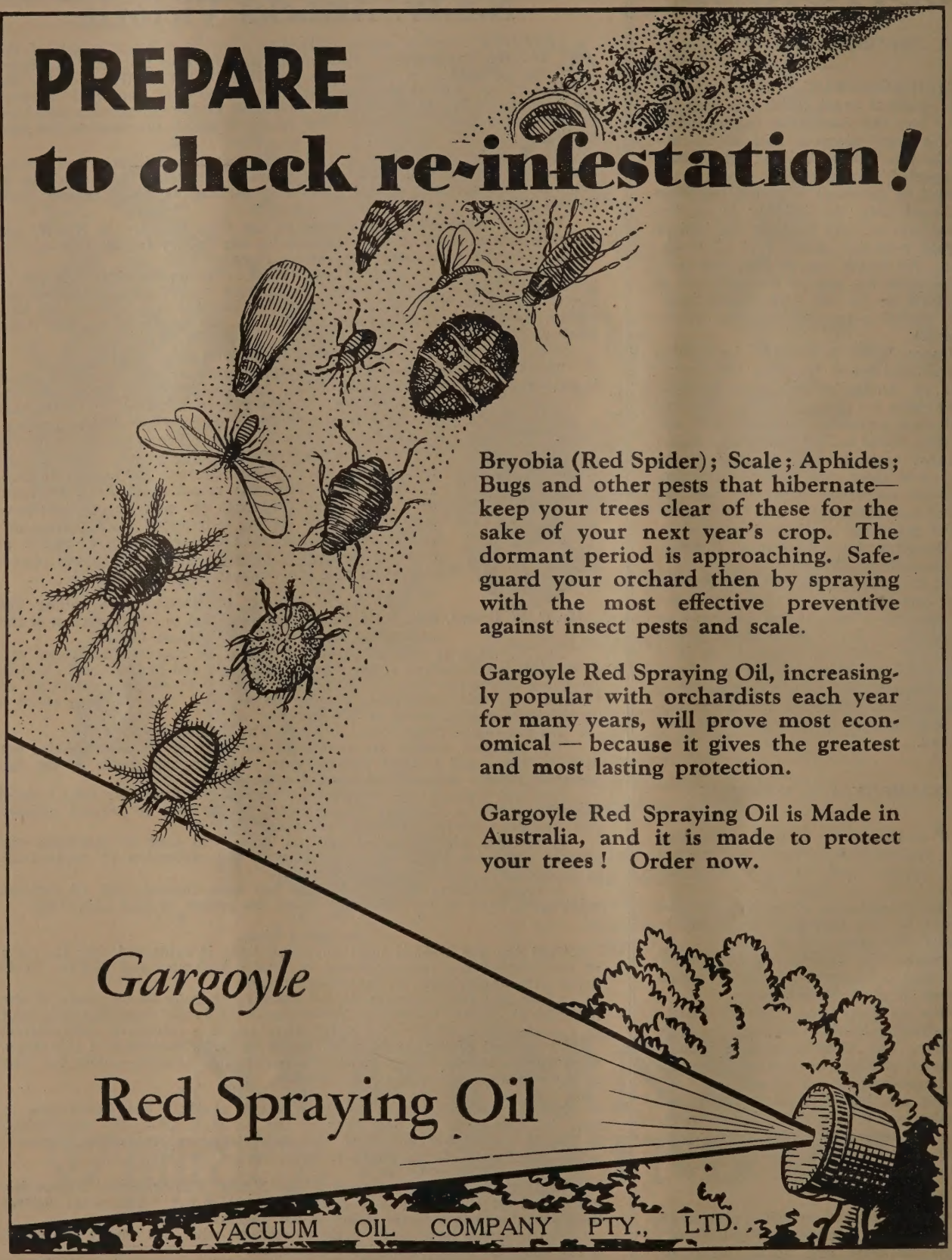
* * * * *

Will "Fruit Culture" explain if the N.S.W. Fruitgrowers' Federation authorised its official organ to attack the V.F.M.A.? Also what control the Federation has over the policy of its "official" organ.

Fruitgrowers have many pests to contend with, but among the worst is the one who sows the seeds of dissension.

Progress can only be made on the lines of harmony and goodwill.

PREPARE to check re-infestation!



Bryobia (Red Spider); Scale; Aphides; Bugs and other pests that hibernate—keep your trees clear of these for the sake of your next year's crop. The dormant period is approaching. Safeguard your orchard then by spraying with the most effective preventive against insect pests and scale.

Gargoyle Red Spraying Oil, increasingly popular with orchardists each year for many years, will prove most economical — because it gives the greatest and most lasting protection.

Gargoyle Red Spraying Oil is Made in Australia, and it is made to protect your trees! Order now.

Gargoyle

Red Spraying Oil

VACUUM OIL COMPANY PTY., LTD.

It is Time This Nonsense Ceased.

Comments on Victoria's Recent Unfavorable Press Publicity.

(By R. E. Boardman.)

AS the names both of the writer and the "Fruit World" were recently gratuitously dragged into the recent barren press controversy in Melbourne, it appears desirable that the following should be published:

Mr. H. G. Colombie assumed the chairmanship of a combined meeting of ten organisations at a Conference convened on February 23. Immediately on taking the chair this was challenged, and a new chairman was nominated. Voting was by show of hands. Mr. Colombie himself counted the votes, and announced that eleven had voted for him and thirteen against; he therefore vacated the chair in favor of the other nominee, Mr. Parnham.

When Mr. Parnham took the chair I agreed, at his request, to take the minutes of the meeting.

Remember the date—February 23. On March 2, Mr. A. F. Fullard wrote to the Melbourne "Argus," asking me as "Secretary," to supply the names of those who had voted for and against Mr. Colombie. As I was not "Secretary" of the meeting, and had no knowledge of the voting (being otherwise engaged at the time), I could not supply the information, and prepared a personal letter to Mr. Fullard accordingly.

Then, on March 7, Mr. Colombie took up the cudgels by repeating the enquiry in the press:

I have never heard a more foolish request from a public man.

1. Mr. Colombie himself counted the votes, and if he seriously wanted the information, then, and then only, was the opportunity for obtaining the names of those who voted. Five minutes later—**one minute later**—and the opportunity was gone for ever.

2. The folly of Mr. Colombie's request is heightened by the fact that I was not in the room at the time. I was engaged at the door with the C.T.A. attendant. Again, many of those present and voting, were strangers to me.

* * * * *

I thought my reply to the "Argus" would have closed this arid debate. But no. A Sydney paper entitled "Fruit Culture," in its issue of March 15, publishes Mr. Fullard's enquiry, but makes no comment as to my effective reply.

* * * * *

Is this the type of stuff which fruitgrowers want?

The present times are difficult enough and the best energies are needed of all men possessing ability and goodwill to be of service.

* * * * *

In the foregoing, as in all matters, we need to get the right perspective and to take the long view. Also, none should lose the saving grace of the sense of humor.

Collection of Claims.

AT THE SYDNEY MEETING of the Australian Apple and Pear Export Council consideration was given to the question of having in England a capable representative to attend to the collection of all claims for damaged cargoes.

Delegates gave attention to the carefully drafted proposals and took these back for consideration before their State associations in order to come forward with a recommendation to the next Council meeting.

Doubtless the delegate from the Australian Apple and Pear Export Council, Mr. G. W. Brown, who is now in England, will go fully into this matter and come back with a considered report.

In the meantime, the legal decision has been announced in the "Hobsons Bay" case, wherein a claim for compensation on fruit damaged in transit was successfully pursued. This legal decision brings the whole subject into focus, and it is one which deserves the close consideration by all exporting growers.

It should be remembered that British steamship interests have their Mutual Protection Club, with practically unlimited resources to contest any claim for damages.

It will be remembered that Tasmania already has established a fund of several thousand pounds with which to pursue any claim for damaged cargoes.

It is certain that the whole export industry of Australia—in fact N.Z. as well—would do well to submit to a levy which would create the necessary funds to contest future cases for damaged cargo.

Probably, too, the suggestion which was placed before the last meeting of the Australian Apple and Pear Export Council will be now favorably considered, namely that of having an appointed representative in England to attend to all claims.

The Apple Export Industry.

Some Recent Happenings in Victoria.

THAT AN IMPORTANT forward move has been made by the Apple export industry cannot be gainsaid. This is demonstrated by the increased interest displayed in the methods adopted by the Apple and Pear Export Council by the overseas trade following the disastrous season of 1933.

The decision to improve conditions by meeting the market requirements as to sizes, varieties, the elimination of "plain" grade fruit and limiting the export to a given figure gave a fillip to the business and re-established confidence at a time when it seemed hopeless to expect such a favorable reaction. Unfortunately during March the Victorian Fruit Marketing Association section of the Council has suffered some very unfavorable publicity, which cannot but create a bad effect in the minds of the uninitiated.

The matter of the industry's credit is important, and a rather pitiful exhibition of needlessly magnifying incidents of minor significance in the press does not redound to the credit of those responsible, some of whom aspire to be the industry's guiding stars.

A brief resume of the incidents which led up to the imbroglio may be informative.

As some suggestions for amending the constitution of the V.F.M.A. had been under discussion, this body issued invitations to kindred associations to confer on this matter on January 26. Mr. H. G. Colombie presided.

The purpose of the meeting, however, seemed to be lost sight of in listening to a dissertation by a delegate from the Orchardists and Cool Stores' Association, describing new forms of organisation, viz., control boards, to control the local and interstate marketing of fruit (including Peaches, citrus and berries), and as so little progress had been made with the constitution a further meeting was arranged for February 9. This meeting was duly held, and within the first five minutes the delegate previously referred to moved that the matter of the constitution be deferred, and instead that the meeting consider the fruit space allocation on steamers and that the meeting authorise a deputation to the Minister for Commerce requesting an investigation.

To say that this was an error of judgment is treating the matter gently, as certainly the delegates present had no authority to commit the associations represented to the resolution submitted, as the meeting had been called for an entirely different and specific purpose.

However, the space allocation subject was discussed, and it was decided to

meet within a month, when shipping and other bodies interested could attend.

Mr. Colombie insisted on the meeting being held within a fortnight against the wishes of the majority of those concerned and a number of the delegates attended in a hostile mood as was evidenced by his being challenged on taking the chair and the appointment of a new chairman.

The net result of all this storm in a teacup is that the matter was deferred until May as originally suggested, and meantime the subject which justified the calling of the first meeting has not been dealt with.

The late Charles Griffeth remarked truly during his occupancy of the V.F.M.A. chair, that "movements are bigger than men," and the movement will progress provided sound judgment and commonsense prevail.

But if movements are to be made the stamping grounds for the promotion of individual self glorification, naturally discredit will fall heavily upon them.

Fruit Industry Problems

IN THE HEAT of a controversy it is possible for human beings at this stage of our evolution to do and say things which afterwards leave regret. A man can undo a lifetime of good by one act.

Just what the public thinks, or what the great mass of splendid fruit producers think, over the recent happenings in Victoria can be left for each to decide. The chronicler must state things as they are. Perhaps some day we shall be able to cease magnifying our individual problems.

Here, again, Mr. Colombie's name crops up. While acknowledging with appreciation his services to the industry, the fact remains that he is now a storm centre, and this arising out of an incident which could have been treated as a triviality.

Briefly, Mr. Colombie insisted on a meeting of ten associations being held at a time inconvenient to the majority, and the meeting appointed a new chairman. Mr. Colombie promptly resigned from the V.F.M.A. and as honorary adviser to the Australian Apple and Pear Export Council, though why these two organisations should have been singled out for his disfavor it is difficult to imagine.

Then followed certain publicity in one section of the Melbourne press.

The Truth About the Harcourt Meeting.

A meeting of some sixty growers was held at Harcourt on Monday, March 12, when a resolution was carried supporting the Victorian Fruit Marketing Association, provided amendments be made to the constitution. **Although Mr. Colombie spoke at length, no resolution was carried, or even submitted, asking him to postpone his visit to England.**

Imagine everyone's surprise to read in the "Argus" the next morning the following report:—

Mr. Colombie's Resignation.
Concern at Harcourt.

HARCOURT, Monday (Mar. 12).—At a meeting of the Harcourt Fruit Export Committee, concern was expressed at the resignation of Mr. H. G. Colombie from the Victorian Fruit Marketing Association, and the following resolution was carried:

"The Harcourt Fruit Export Committee recognises the service that Mr. Colombie has given to the export section of the fruitgrowing industry of the Commonwealth, and believes that his presence in Australia would be of material advantage in assisting in the reorganising of the industry and requests him to postpone his visit to England to a later date."

No mention was made in the above report to the big meeting—only the resolution which had apparently been carried at a prior meeting of the Harcourt Fruit Export Committee.

And, here's the rub. It was this same Harcourt Fruit Export Committee which called the big meeting. Further, it is generally understood that this Committee consists of six men.

The report in the "Argus" of March 13 was accepted by many as expressing the opinion of Harcourt growers, especially as the "Argus" had featured the fact that Mr. Colombie would speak there on March 12.

Would it not have been better for this Committee, consisting as it does of earnest men, who desire to improve the industry, to have told the big meeting of their resolution, and to ask for endorsement?

On Wednesday, March 14, the "Argus" published its report of the big meeting at Harcourt, giving the resolutions, as published elsewhere in this issue.

It is obvious to all, of course, that Mr. Colombie's feelings have been ruffled. At the same time, it is difficult to escape from the fact that he is not without blame in this matter.

But who is without blame in this world? The world wags on, and we all find in time—though none of us like it—that we are not indispensable.

When will the storm subside? Let us hope it will be soon. What is the big consideration? The industry, of course, and not personal squabbles.

Shall not our better judgment lead us all into the large fields of useful activity?

"THE FRUIT WORLD."

FOR THIRTY-FIVE YEARS the "Fruit World" has faithfully represented the Australian fruit industry. This is a record of service of which we are proud, and it is good to have an ever-increasing number of appreciative readers.

The "Fruit World" has always given impartial news regarding happenings in the fruit industry throughout Australia, while in our editorial columns matters of current interest have been commented on and leadership given on matters of policy.

Growers do not readily forget the fight put up by the "Fruit World" to obtain more equitable treatment as regards sugar—still a vexed question.

After much effort we were successful in securing the reopening of the fruit shops in Melbourne after they had been closed through clashing Factory Act legislation.

The "Fruit World" has stood behind every worthy movement for the better organising of the industry—improved transport arrangements by rail and sea, increased research work to combat pests and diseases.

In our news columns we have given not only Australian experiences as regards improved cultural methods, but scientific and practical notes from abroad.

Our columns are open at all times for the free expression of opinions by growers on matters of policy or in securing practical cultural hints.

The Editor would like to express gratitude for the practical expressions of appreciation freely tendered by growers particularly during the past few weeks.

Our services are now, as ever, fully at the disposal of the growers and the industry. We visualise better understanding between all sections of growers having interests in common, and foresee great opportunities for usefulness in the present organisations and others which may be created to operate on similar or improved lines.

FRUITGROWERS' RELIEF.

It is understood that some 350 Apple and Pear growers in Victoria applied for their share of the Federal Government's grant of £36,000 to aid those who suffered losses in the 1933 export season.

BRIGHTON ICE WORKS, X 2015—Space for 1,000 cases Apples.

FOR SALE.—Orchards in Doncaster district—42 acres, 24 acres, 14 acres, and others; Recommended; Inspection invited. John Tully, lincensed land agent and sworn valuator, Doncaster, Victoria. 'Phone: WX 2135.

Shipowners' Liability.

Legal Action for Faulty Carriage Won by British Fruit Importing Firm. Far-Reaching Effects.

THE MINISTER OF AGRICULTURE in Victoria, Mr. Allan, has received from the Victorian Agent General in London, particulars of a recent court case of especial interest to Australian fruitgrowers and exporters. The case arose from a claim by Messrs. White & Son, wholesale fruit agents, of London and Hull, against the owners of the steamship "Hobson's Bay" for damages arising out of the carriage of Apples shipped from Melbourne, and which were found to be unsound on arrival at Hull.

Prior to this case, a similar claim, fought in the English courts over a period of several years, had been won by the shipowners, and, because of the enormous expense involved, and the precedent already established, shippers had been afraid of again contesting this issue. As a result, however, of the action of Messrs. White & Son, the English courts have now established that if a shipowner accepts for carriage in refrigerated stowage, Apples shipped in sound condition, and delivers them in unsound condition, the onus of proof of accounting for such damage rests with the shipowner. It has been established also that if the shipowner in discharging this onus relies upon one of the exceptions allowed to a shipowner under the Australian Carriage of Goods by Sea Act of 1924 — such as for instance, "inherent vice" of the fruit, the onus of proof as to the proportion of the damage due to such inherent vice is on the shipowner.

In this case, the claimants' contention was that the Apples had been damaged through freezing, while the shipowners argued that the damage was due to inherent vice—in other words, the condition known as internal breakdown.

The County Court judge decided that the damage was caused by uneven temperatures in the hold, and found for the plaintiffs. The case was taken to the Appeal Court, but the appeal was dismissed in a unanimous judgment, in which it was stated by the court that if damage were due partly to faulty refrigeration and partly to another cause, such as inherent vice, the shipowner in order to escape liability for this latter part of the damage must establish by definite proof (1) the fact that the damage was caused by inherent vice, and (2) the amount of damage so caused. If he failed to prove either of these, he was liable for the whole of the damage found on discharge.

The Australian Apple trade in Great Britain has been affected not only by heavy supplies, but also by the arrival of Apples in bad condition, and it is hoped that this decision will result in greater efforts being made by the shipowners to land their cargoes in sound condition. Shipowners have established a fund for the purpose of fighting such claims as those of Messrs. White & Son, and it is suggested in London that Australian fruitgrowers, whose interests are so vitally affected, should establish a similar fund to see that the ground won shall not be lost again.

"THE CANNED FRUIT TRAGEDY."

(The Editor, "Fruit World.")

Sir,—Mr. A. R. Townsend is alleged to be investigating the troubles of the canned fruits industry. When meeting the delegates of the Northern Victoria Fruitgrowers' Association he carefully expressed his opinions regarding stocks, and suggests that the growers who urged the processing of the whole crop will now find themselves in an embarrassing position. Those who urged the processing of the crop are quite satisfied that the statements they made to the chairman of the Closer Settlement Board were in accordance with fact, and demonstrated a better knowledge of the industry as a whole than those who sit in authority, and leave nothing but a trail of despair in their wake. At the commencement of this year, Mr. Townsend stated that we held a carry-over of 800,000 cases, and it is safe to conjecture that had no attack been made on the restrictive policy of the Board of Control that 800,000 would still be in stock. Since, by outside pressure, the Control Board reduced prices, it is now stated that the sales effected since the beginning of January are 600,000 cases, and every possibility of the 1,000,000 cases mark being reached by the end of March.

Considering that the average monthly case consumption in Great Britain is 350,000 cases, with the peak months of April, May, June, July and August yet to be enjoyed, there is every sign that insufficient stocks will be available in early 1935 to meet forward purchases. If any one is likely to be in an embarrassing position it is Mr. Townsend. It is all very well for a civil servant secure in the privileges of security of tenure, pensionable service, holiday and medical leave on full pay, and limited hours to talk to men who have invested their war payments in cultivation blocks, about adjusting themselves to conditions due to faulty management. Low price levels can to some extent be borne by increased production only, and that is the view soldier growers would have placed before Mr. Townsend if he had made his investigations less secretive.

Mr. Townsend referred to the fact that varieties grown here, and suitable for Australian consumers are not preferred by the English housewife. If Mr. Townsend knows as much of the English consumers as he appears to know of other canning fruit matters it is tragic. In the first place, the varieties Mr. Townsend infers should be grown, are those canned largely by the Californian packers. We are told that the Californian grower is bankrupt, that the packing corporations lost millions of dollars last year, and production dropped 42 per cent. last year. The Australian growers of the same varieties are suffering likewise, with all their virtues, the types cannot demand a better selling price, and the cannery out-turn is dozens less per ton than the "Pullar." All the varieties are prone to disease—this year every variety has suffered to the extent of 50 per cent. brown rot, and under the best conditions the mid-seasons cannot be produced for £14 per ton, and I have known it to cost £200 per ton to produce. If growers can stand this, then it is a commercial proposition to produce Bananas in the Shetland Isles. So far as the tastes of the English consumer can be judged, one has only to remember that the very same consumer uses extensively margarine, egg substitutes, synthetic and fruit essences; it should also be remembered that the whole of the Californian pack is not choice. I know the industrial districts of the British Isles, and so long as the goods are wholesome there is business to be done. Such indefensible statements condemn the policy of Government interference with business.

Yours etc.,
E. BLACKBURN.

Merrigum.

— THE —
BAVE-U
Power Sprayer
— SINGLE ACTING MODEL —
This machine is thoroughly reliable and sturdy, and will supply two hoses at any desired pressure. It is moderately priced and represents the — best value on the market to-day. —
Write for full particulars
.. to the manufacturers ..
RUSSELL & CO.
ENGINEERS
Box Hill, E11, Victoria

"VALLO" ORCHARD SPRAYS

ALL AUSTRALIAN MADE — COMPLY WITH STANDARD OF QUALITY SPECIFIED BY THE VARIOUS STATE DEPARTMENTS OF AGRICULTURE.

ARSENATE OF LEAD
(Paste and Powder)

Made entirely from Australian materials.
Guaranteed not to contain foreign Arsenic, but exclusively Australian pure White Arsenic produced by Messrs. Victor Leggo Mining Co. Pty. Ltd.

PATENT CODLIN MOTH TREE BANDS.

Certain death to all grubs that attack fruit trees. They are deadly in their purpose, and there is no necessity to remove or even inspect them.
Your Orchard is not adequately protected until fitted with "Vallo" Patent Codlin Moth Tree Bands.

NICOTINE SULPHATE.
40% Nicotine Guaranteed.

Invaluable to Orchardists, market gardeners, and home gardeners for the control of aphids, thrips, mites, red spider, white fly, lice and other soft-bodied sucking insects.

COPPER SULPHATE (BLUESTONE)
Commercial Crystals—Neige Crystals, Finely Powdered.

Satisfaction is assured from the use of these high quality products, which are equal to the best imported English Copper Sulphate.

LIME SULPHUR WASH.

The most reliable, economical and effective Lime Sulphur Wash of the highest concentration. Is a control of scale of every kind on deciduous and citrus trees.

OTHER "VALLO" SPRAYS.

PREPARED WHITE OIL.
OVICIDAL WASH.
SPRAY SPREADER.
PREPARED RED OIL.
SPECIAL SPRAYING SOFT SOAP.
PREPARED SPRAYING LIME.
FRENCH BORDEAUX.
ATOMISED SULPHUR POWDER (DRY).
ATOMISED SULPHUR POWDER (WETTABLE).
CALCIUM ARSENATE.
"ARZEEN" (SOLUBLE ARSENIC).

Manufacturers :

VICTOR LEGGO & FARMERS LIMITED

222 QUEEN STREET - MELBOURNE

Distributors all States.

N.S.W.: A. Victor Leggo & Co. Pty. Ltd., 9 Phillip Street, Sydney.
Queensland: A. Victor Leggo & Co. Pty. Ltd., 72 Albert Street, Brisbane.
South Australia: Percy J. A. Lawrence, Panmure Chambers, Gresham Street, Adelaide.
Western Australia: Mr. A. Hicks, 18 William Street, Perth; and all Wholesale Distributing Houses.
Tasmania: North-Western Mercantile & Agency Co., Devonport.
Tasmanian Orchardists' and Producers' Co-op. Association Ltd., Hobart.
W. Hart & Sons, Davidson & French Pty. Ltd., Launceston.

CARRIAGE OF FRUIT BY SEA

To Interstate Markets

FRUIT SHIPMENTS FOR SYDNEY AND QUEENSLAND PORTS SPECIALLY CATERED FOR

REFRIGERATED AND ORDINARY CARGO SPACE AVAILABLE.

Regular weekly service of **Fast, Modern, Passenger Steamers,** fitted with ventilated 'tween decks and Refrigerator Chambers.

By special arrangement Fruit, etc., **for Sydney,** leaving Melbourne **Noon Saturdays,** is delivered on Sydney Wharf **6 a.m. Mondays,** ready for early morning market.

Fruit for **Brisbane,** leaving Melbourne **Noon Saturdays,** delivered Brisbane Wharf **8 a.m. Thursdays.**

SPECIAL REDUCED RATES OF FREIGHT.

For further particulars and sailing dates, apply to:—

AUSTRALIAN STEAMSHIPS PTY. LTD.,
Howard Smith Ltd., Managing Agents, 35 Market Street, Melbourne, C.1. Tel., Cent. 8314.

AUSTRALASIAN UNITED STEAM NAVIGATION CO. LTD.,
MacDonald, Hamilton and Co., Managing Agents, 467 Collins Street, Melbourne, C.1. Tel., Cent. 9708.

ADELAIDE STEAMSHIP CO. LTD.,
505 Collins Street, Melbourne, C.1. Tel., Cent. 475.

HUDDART PARKER LTD.,
466 Collins Street, Melbourne, C.1. Tel., Cent. 8960.

McILWRAITH McEACHARN LTD.,
94 William Street, Melbourne, C.1. Tel., Cent. 9440.

MELBOURNE STEAMSHIP CO. LTD.,
31 King Street, Melbourne, C.1. Tel., Cent. 8693.

TRAVEL INTERSTATE BY SEA

Cold Storage In Australasia

In response to many requests, the "Fruit World" is now reserving this special Fruit Cool Storage Section to deal with the every-day problems of the cool store manager and refrigerating engineer, from whom enquiries are invited. Practical cool storage notes of interest are also invited from readers. Address correspondence to Practical Refrigeration Department, "The Fruit World," Box 1944, G.P.O., Melbourne, or 439 Kent-street, Sydney, N.S.W.

"Keeping the System Free From Oil"

WHILE the purging of oil from the refrigeration system may seem perhaps of minor importance in the maintaining of a plant in first-class order, it is the detrimental effect over a long period of time, rather than any immediate result, that calls for care in this respect. Oil of course must enter the system in varying quantities, as the piston and valves must receive lubrication. The amount that passes in, varies with the type of compressor used and the condition of the piston rods and cylinders. However, with a properly installed oil trap and constant attention, very little oil will pass into the condensers and cooling coils. The real harm of a system clogged with oil is in the reduced cooling effect of the cooling coils more so than the condenser.

As most of the cooling coils are practically level and in some cases pocketed, it naturally follows that oil will lay in the bottom of the pipes, and not having the same conductivity as the piping, the cooling effect of any given quantity of coils is reduced, thus lowering the back pressure, reducing the efficiency of the compressor and adding to the time of running.

Figuratively, 1,000 ft. of new coils may be reduced to the effect of 700 to 800 ft., when badly clogged with oil.

On the condenser side the same thing happens to a minor degree, as on account of the higher temperature, the oil passes more rapidly through the condenser and is partly trapped in any low places in the liquid receiver. Oil, of course, does not remain in its usual form in the coils, but becomes saturated with ammonia, but being heavy lays low in the system.

Careful periodical purging from the oil trap and not allowing it to fill right up will keep the plant reasonably clean, but at any time any joints are broken, the opportunity should be taken to allow the oil to drain out as much as possible.

Blowing out with air is not always advisable as a lot of moisture is trapped in the system, especially if the coils are cold. It is also quite a good plan to have an oil drain valve at the bottom of the liquid receiver to get rid of any oil that passes the delivery oil trap.

One of the best accessories to help keep the oil out of the system is a suction oil trap with a simple steam jacket around the base. This trap is particularly useful in old systems, and if properly worked will also prove a great aid in keeping the amomnia free from moisture. Messrs. R. Werner & Co. Pty. Ltd., Melbourne, have recently designed a simple little trap on these lines. The price is £7 packed f.o.b. Melbourne, plus sales tax. Fitting up can be quoted separately when distance from steam line is known. Full instructions sent with trap.

As a matter of fact, traps of this description should be standard with any plant, but as the real use of it does not come in for a year or two, manufacturers have not considered it necessary to include anything but immediate necessities.

COOL STORE NEWS.

Major Arnot, of Batlow, is rushing in a 5-7 ton Werner plant, driven by a 14 h.p. "Lister" Diesel engine, to catch this season's Apples.

This plant is being installed on the direct expansion system in a "pese" building, the insulation being 18 in. of earth in the walls, about 10 in. sawdust in the ceiling and mother earth for the floor. This plant will be watched with interest as in the cool climate of Batlow and on cheap crude oil power it may prove a good proposition.

Mr. Robinson, of Scoresby, has just started up his new 6,000 case store with a 5-7 ton "Werner" plant, and 14 h.p. "Lister" Diesel. This is another "right in the orchard store," and has proved invaluable during the recent hot spell for getting the fruit under control. Direct expansion is used and the owner states that the entire attention to plant over a busy day running two periods would not exceed an hour.

Messrs. Brunnings, of Somerville, have just added another room of about 3,000 cases to their 7-ton "Werner" plant.

Blackburn cool stores have had their battery tank renewed with a cork insulated steel tank on a new system, and are delighted with the results.

Tyabb have added to their condenser capacity and do not know how they would have weathered the hot spell without the additional coils.

Cool Store at Thulimbah, Q.

When the Minister for Transport, Mr. J. Dash, visited Stanthorpe recently, he received a deputation from the Thulimbah fruit growers asking for the lease of land fronting the station to erect a cool store and packing house. Mr. Dash promised the growers that favorable consideration would be given to this request.

RICE GROWING IN AUSTRALIA.

Crop Valued at £408,000.

RAPID ADVANCE has been made in Rice cultivation in Australia during recent years. First grown on a commercial scale in 1924, when 157 acres were put under cultivation in the Murrumbidgee Irrigation area, the acreage has since grown to 22,000, from which 35,500 tons of Rice was harvested last season. This was valued at £408,000. Practically the whole of this crop was grown in the irrigation area of N.S.W.

About 10,000 tons of this yield had to be exported to the Pacific Islands and the East, as it exceeded the normal consumption of Australia. The land on which this Rice is grown was practically useless for wheat, but after a crop of Rice is grown on it, a following crop of wheat or oats can be grown with fair success.

Orchardists and Cool Stores Association of Victoria.

ANNUAL CONFERENCE, RINGWOOD, MAY 15.

The Annual Conference of the Orchardists and Fruit Cool Stores' Association of Victoria, will be held at Ringwood on Tuesday, May 15 (unless it be found necessary to hold it at a later date).

Messrs. F. M. Read and G. B. Tindale, of the Department of Agriculture, will address the Conference.

CATALOGUES RECEIVED.

L. P. Rosen & Son, Carlingford, N.S.W., 1934 catalogue of fruit trees, roses, ornamental trees, climbing plants, hedge plants, breakwinds and shelter trees. Planting hints are included in this catalogue, also helpful notes regarding fungoid, scale and insect pest remedies.

VICTORIA — Association Reports . . . Items of Interest

Victorian Fruit Industry.

Control Board Legislation Being Drafted.

Growers' Opinions Divided.

Although a large meeting of fruitgrowers at Box Hill voted adversely to proposals for legislation to deal with local marketing, a committee was formed to consider methods for improving the industry.

Mr. W. J. Williamson, M.L.C., a member of the Committee referred to, states that a draft Bill has been prepared for presentation to Parliament: this would be submitted to a meeting of growers. The object was to provide for the election of a Board to represent all Victorian fruitgrowers. Separate boards could be elected to deal with Apples, Pears, Peaches and Apricots, citrus and berries. The proposed Board would be in a position to speak for the industry, including the export of Apples and Pears. A shipping agents' association could be formed from the present shippers and a joint committee could be arranged to deal with matters of common interest.

. . . .

On the public announcement of the foregoing, adverse comment is to hand. Growers state that they were not represented during the drafting of the proposed Bill, and vigorous opposition is certain. Further details are awaited at the meeting which, it is understood, will be called.

Later.—The meeting to consider the foregoing will be held on Tuesday, April 24, at Employers' Federation, Melbourne, at 10.30 a.m.

CITY WITHOUT FRUIT.

Melbourne and Suburbs "Fruitless" on March 14.

No fruit was available in Melbourne and suburbs on March 14, owing to the Retail Fruiterers' Annual Picnic. The opinion has been widely expressed that if fruiterers desire to have a picnic there is no reason why they should not do so, but it is a pity that the public should be deprived of the opportunity of purchasing fruit on that day. A severe loss is suffered by the growers.

Extensions to Packing Sheds.—Messrs. Swallow & Ariell have effected substantial additions to their fruit packing shed at Mildura. The directors of the company, Mr. C. A. M. Derham, Sir Walter Leitch, Mr. J. C. Gates, and Mr. G. K. Ackman, hope to visit Mildura at an early date.

HARCOURT.

A largely attended meeting convened by the Harcourt Fruit Export Committee was held at Harcourt on March 12. Mr. J. H. Lang, who presided, said that Mr. H. G. Colombie had been invited to attend to give his views regarding his recent resignation from Australian fruit organisations and to give advice regarding the better organising of the industry.

In addition to the Harcourt growers there were also present: Messrs. J. W. Barker, C. J. Parnham (members of the Executive of the Victorian Fruit Marketing Association), K. Weeding (S. J. Perry & Co.), and R. E. Boardman, Secretary of the V.F.M.A.

Mr. Colombie stated he would not go into details regarding his resignation. As regards organisation, the 1927 Control Bill had not provided for adequate State representation. His services, however, were available if growers desired a Control Board or other form of organisation. He desired to keep out of press controversies and would not personally join any organisation.

In reply to a question by Col. W. E. James, Mr. Colombie stated he could not recall one instance where shippers at V.F.M.A. meetings had voted adversely to the growers.

Mr. Parnham said that in the V.F.M.A. and the Australian Apple and Pear Export Council the growers had full representation. The organisations were democratic and had performed services of national value to the industry.

In reply to a question by Mr. Parnham, Mr. Colombie said he was neither for nor against an Export Control Board, neither was he for nor against the V.F.M.A.

Mr. J. Smith seriously regretted that the Council had rejected the Rymer variety. Mr. Parnham said he too regretted that decision, nevertheless, the Council was Australian wide in character and growers were fully alive to their decision, especially in view of the fact that each State made sacrifices as regards varieties for export.

At the request of the meeting, short addresses were given by Messrs. Barker, Weeding and Boardman.

After further discussion, the Chairman stated that there were three alternatives before the meeting: (1) To advocate the Control Board system; (2) To continue with the V.F.M.A. on its present basis; (3) The V.F.M.A. with an altered constitution.

There was an overwhelming vote in favor of No. 3, and Mr. Allan McLean was appointed to convene a meeting to consider amendments to the V.F.M.A. constitution and for the electing of delegates to attend the combined meeting at Melbourne in May.

Doncaster.—At the monthly meeting of the Doncaster Fruitgrowers' Association on March 28, there was a discussion regarding district representation on the Victorian Fruit Marketing Association. This discussion arose out of a recent combined meeting, when it had been suggested that the delegates did not fully represent the growers.

On the motion of Messrs. E. H. Zerbe and T. H. Petty, it was decided:

"That Messrs. W. A. Webb and E. I. Lawford be thanked for their services on the executive of the V.F.M.A., that confidence be expressed in their representation, and that their actions on behalf of the growers be endorsed."

It was further decided to request the Southern Fruitgrowers' Association to take any action necessary to oppose the proposed Fruit Control Bill.

It was decided to ask the V.F.M.A. to recognise the nomination of a delegate from the Southern Fruitgrowers' Association as the additional metropolitan member for the meeting to be held in May.

. . .

Pears Hanging Well.—The Doncaster district does not appear to have suffered to the same extent as other districts in the recent heat wave. Comparatively few Apples are grown. Pears are hanging well. This district has an ample supply of water for irrigation.

Queensland Fruit in Melbourne. — Details of Queensland fruit, which arrived in Melbourne from January 6, 1934, to February 27, 1934 (trains Nos. 1 to 8), are given as under by Mr. A. V. Wilson, Melbourne Representative of the C.O.D., Brisbane:—(Cases): Bananas, 45,276; Pineapples, 14,893; Passionfruit, 519; Mangoes, 279; Papaws, 56.

Grape growers in the Goulburn Valley who sprayed their Grapes only once, lost the best part of their crop with black spot or else downy mildew, while those who sprayed carefully two or three times have not suffered.

Victorian Berry Growers.

Sugar Situation Criticised.

Better Organisation Desired.

A CONFERENCE of berry growers held at Monbulk on March 27, was attended by 150 delegates from Monbulk, The Patch, Wandin, Silvan, Evelyn, Mt. Dandenong, and Emerald. Speakers included Messrs. Hutchinson and Fairbairn, M's.H.R., and Lieut.-Colonel Knox, M.L.A.

There was much plain speaking at the meeting, and the chairman, Cr. S. G. Harris, said the conditions existing in the industry were deplorable, and that the industry would perish unless some speedy assistance was given.

The coming into existence of the sugar committee was outlined by Mr. W. J. Hutchinson. This was formed by the Federal Government to assist the fruit industry. The moneys distributed were made available by the sugar industry, but a climax had been brought about by the reduction in the amount which was originally £315,000, and which is now £200,000. £20,000 was available to the berry industry, of which £19,000 went to Tasmania and £1,000 was available to Victoria.

One grower said they never got a penny of this money. The board could disburse its funds to processors of fruit for export and for domestic use, and for the selling and extending the consumption of jam.

Mr. G. Knox, M.L.A., said that he had placed their request before Parliament, but he thought that the whole cause of the trouble was that there had been too much interference with economic conditions.

Mr. Mitchell (Secretary of the United Berry Growers) said the story told to them by Mr. Hutchinson was the same old story that Mr. Townsend always told them, and that they did not accept it and would not accept the conditions offered to them. The Blackberries were sold at £23/6/8 per ton. The processor for boiling these Blackberries, received £11/3/6, and for boiling a ton of Strawberries received £12/7/6. Was this an equal distribution? The committee allotted £70,000 out of £200,000 to the canners of Peaches, Pears and Apricots in Victoria, and they thought these were the only fruit industries worth saving. The growers received £1,500 last year, and this year they received nothing.

Mr. Walker, of Menzies' Creek, said if £5,000 were paid out it would mean another penny per pound, and it would enable the growers to live.

The following motions were carried:—

"That a sufficient sum of money be voted by the Sugar Concession Committee annually to the berry growers on the mainland to make up the balance between the price declared by the Concession Board and the cost of production of mainland growers, plus 5 per cent."

Mr. Fairbairn declared this to be unconstitutional, so the following was agreed to:—

"That our Federal Members of Parliament be asked to endeavor to get the wording of the Sugar Agreement Act altered, so that Victorian berry growers receive a pro rata share of the £200,000 allotted by the Fruit Industry Sugar Concession Committee for berry fruits, whether their fruit products are exported or not."

"That the Federal Government be asked to instruct its agents to find overseas markets for berry fruits."

"That the central executive of the Berry Growers' Association be instructed to organise the whole of the berry growers of the State into one body."

"That the Victorian Government be asked to grant sustenance to the growers on production of accounts, same not to be repaid, so that growers may remain on their farms."

"That housewives receive a rebate on all sugar used for the making of jam."

"That the Government be asked to make advances for manure to growers in necessitous circumstances."

"That we, as representative growers, organise the resist any orders of the court for the sale of implements or stock."

"That the Government be asked to immediately institute an inquiry into the conditions existing in the metropolitan markets, as berrygrowers have found over many years of chronic shortage of space, and lack of facilities for orderly marketing."

Yarra Glen.—There were many splendid exhibits at the Yarra Glen Show held on March 21, which was opened by Hon. W. H. Everard, M.L.A. The fruit section was a credit to the exhibitors, prominent Apple varieties shown being Jons., R. Beauty, Reinette du Canada, Rymer, Stone Pippin, G. Smith, Five Crown, Pomme de Neige, Stewarts, Yates and Delicious, Pears, Plums, Lemons, Oranges, Passionfruit, Quinces and Almonds were also included. Principal prizewinners were: J. Smedley, W. Hubbard, Mrs. J. McCullough, S. B. Mowle, J. W. Lawrey, Andrew Cooper, Miss C. N. Bell. There were also sections for vegetables, flowers, cookery, needlework, schoolwork, horses, cattle, sheep, dogs, etc.

Somerville.—At the annual show of the Somerville Fruitgrowers and Horticultural Society, the fruit was of good quality, but less in quantity owing to heat wave.

Among the prizewinners were J. Brunning & Sons, J. D. Grant, W. F. Boe, A. Sage, T. A. Fogarty, T. W. White, W. E. Monk, E. Harding, G. E. Shepherd, E. J. Murray, C. T. Isles, G. G. Cole & Sons, T. E. Worcester, J. & B. Caldwell, A. E. Dennett, L. S. Cole, R. J. Thornell, T. H. Barclay, S. H. Hawken, V. Young, R. J. Mair, E. de Bernardi, H. J. Benton, A. H. J. Thornell, Miss S. Hollier, K. G. and A. L. Dennett, Misses S. & E. Dennett, District Packing for Gerrard Shield, Somerville State School.

Apple varieties included Jonathan, Granny Smith, Delicious, Stewarts, Alfriston, etc. Pears: B. Bosc, Jos., W. Nelis, W. Cole, Vicars, Packhams, Howell, W.B.C., etc.

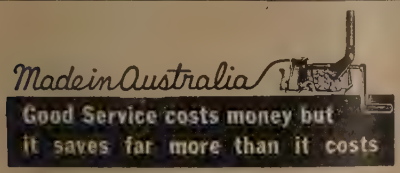
For packing Apples for export, Miss E. Morrison 1, Miss A. Grant 2. Messrs. J. M. Ward and B. Krone, of the Dept. of Agriculture, spoke favorably of the splendid packing of Apples by school children.

Speaking at the luncheon, the President, Mr. W. Brunning, said that the establishment of Spry's "Appura" (pure Apple), crushing plant, was of value to the district. More of this health drink should be consumed.

The judges in the fruit section were: Messrs. G. E. Mock, C. H. Coleman, Jos. Jordan, R. H. Holmes, A. F. Thiele, A. B. Herbert, J. W. Lawrey, J. M. Ward.

Mr. A. F. Telford capably carried out his duties as Secretary.

Diamond Creek. — A successful show was opened by Mr. W. H. Everard, M.L.A., at Diamond Creek during March, the fruit sections being keenly contested. Fine specimens of Jons., G. Smiths, Rome Beauty and other Apples were shown, also Pears, Quinces, Plums and Tomatoes. Principal prize-winners were:—Wadeson Bros., J. Cowin, H. Mills, H. G. Upton, W. J. Miller, G. T. Herbert, A. B. Herbert, Pryce May, W. J. Nankervis, F. Jones, J. F. Wynne, R. M. Finlay, P. Lawrey, W. Heddle, L. A. Jones, A. Keenan. In addition to the fruit sections there were sections for flowers, poultry, preserves and fancywork, also arena events.



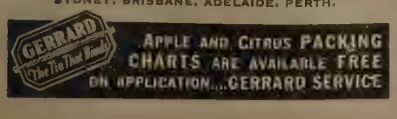
GERRARD

guarantee prompt and efficient machine service to every user of a Gerrard wire tying machine. There are over 5,000 Gerrard users in Australia. The machine and the service must be good to warrant that confidence, AND IT IS.

GERRARD WIRE TYING MACHINES CO. Pty. Ltd.

119-125 Hawke St., West Melb., C.3.

SYDNEY, BRISBANE, ADELAIDE, PERTH.



Victoria.

Once again the Rymer question came up. This is an important variety in the Harcourt district, and with the shortage of other varieties—coupled with the fact that Rymers have brought good prices in U.K. and the Continent for many years — it was hoped by many growers that the export restrictions would be lifted to allow this variety to at least go to the Continent.

At the request of the Dept. of Commerce, the Australian Apple and Pear Council consulted the several constituent State members by telegram, but an adverse vote was recorded. Some States refused to consider any alterations to the proclamation, as contracts had been made on Australia exporting only certain varieties and sizes; others were agreeable for Rymers to go if other excluded varieties and sizes could also be sent.

The fact that the shortage in Victoria would probably be made up in the other States was also doubtless a factor in deciding the Minister of Commerce not to alter the proclamation.

* * *

The whole subject is a difficult one, and it has caused much heartburning. It is certain to be one of the very live topics to be discussed at the next meeting of the Australian Apple and Pear Export Council, which will be held at Melbourne during the Centenary Celebrations.

NOW Available FREE!!

On application, we will gladly post you our new Catalogue, well-illustrated and containing interesting and instructive information for all.

Indicate the Section required by marking X in square.

☐ POWER PUMPS SECTION (Riverside Centrifugals, etc.)
☐ HAND PUMPS SECTION (For General Purposes)
☐ FIRE-FIGHTING SECTION (Hand & Power Equipment)
☐ IRRIGATION SECTION
☐ ENGINES SECTION (Petrol and Kerosene)
☐ ORCHARD SECTION (Spray Carts, etc.)
☐ DAIRY SECTION (Separators, Milking Machines, etc.)
☐ FARM MACHINERY SECTION (Saw Benches, Chaffcutters, etc.)
☐ CYANOGAS for the destruction of Rabbits, Rats, Mice, etc.

Without obligation, please post above Catalogue.

Mr.....

Address.....

.....

Cameron, Sutherland & Seward Pty. Ltd.
Riverside Avenue, Sth. Melbourne S.C.1.
('Phone: M2551.)

DRAINAGE IN MILDURA DISTRICT.

Big Project for Mildura, Irymple, Red Cliffs, Merbein, and Cardross.

FOR the past two or three months growers in the Mildura, Irymple, Red Cliffs and Merbein areas have been giving favorable consideration to a community drainage scheme.

Public meetings were held at several centres; the necessity for a district drainage scheme was admitted, and growers agreed to pay half the cost.

Mr. E. T. Henderson, of the First Mildura Irrigation Trust, interviewed Government authorities in Melbourne regarding finance.

The grant by the Employment Council of £75,000, for the drainage scheme, is to be expended on one area at Merbein, and four areas at Red Cliffs. A previous grant of £15,000 was made for Cardross, where drainage works are in progress. The Mildura settlers have accepted the offer of Mr. Goudie on estimated basis of £10 per acre, but the Government will not be able to consider the allocation of a grant until an estimate of the cost is available.

The growers' contribution will probably be met by a loan repayable over 15 or 20 years through a drainage rate.

STANDARD APPLE CASE FOR EXPORT.

Tests With 9 in. Dump Case.

LAST year and the previous year, some very interesting experiments were carried out on the effect of the shape of Apple cases on the bruising of fruit. These tests indicated that an oversize dump case with a 9 in. width of end, and properly standardised as to moisture content and thickness of timber, gave the best protection against bruising. A full account of this work has been published in C.S.I.R. Pamphlet No. 45 (D.F.P. Technical Paper No. 10), and copies can be obtained on application to the Chief of Division.

These results are now to be checked up with a consignment of 540 cases to London; the fruit is supplied and packed by Messrs. J. W. Bailey and R. Webb, of Narre Warren.

Half the consignment will be packed in Canadian cases and the other half in improved dump cases. Forty of the cases will be examined in England by the Cambridge Low Temperature Research Station. The remainder will be inspected and sold.

It is hoped that this small shipment will provide information on which larger shipments can be based. The shipment is designed to confarm or disprove the results of laboratory work, which must be tested under commercial conditions before they can be used as a basis of commercial practice.

DONCASTER FRUITGROWERS' ASSOCIATION.

The "Fruit World" Appreciated.

At a recent meeting of the Doncaster Fruitgrowers' Association, a letter was received from a Sydney monthly paper requesting to be acknowledged as the "official organ" of the Association. The Secretary was instructed to reply that the "Fruit World" was the official organ.

Merbein Pumping Plant. Merbein growers approve of the installation of an extra pumping plant, but consider the cost is a matter for the Water Commission, in view of the extra areas added to the original settlement since the present pumps were erected.

[The commission's proposals included 6/6 per acre of irrigated land.]

Victorian Fruit Crops.

IN the season report received from the Department of Agriculture, Victoria, the following is stated:—

The export season is now in full swing and approved varieties are being picked and packed for overseas despatch. The estimated quantity of Apples and Pears to be shipped by March 3 was 145,170 cases. The actual quantity shipped was 169,560 cases, made up of 128,668 cases Apples and 40,892 cases Pears, in addition to which 6,216 half-cases of Plums were exported. The quality of the fruit submitted for shipment is excellent, and the packing shows a great improvement on that of former years.

Codlin Moth.—In the orchards there is evidence of very considerable codlin moth

attack, probably a much heavier one than last season.

San Jose Scale.—The campaign against San Jose scale which was carried on last winter has been most effective, very many of the previously infested orchards being now free from the scale.

Fungus Disease. — The Departmental experiments against brown rot and black spot are now almost completed for this season. The later experiments conducted at Doncaster were very successful, and the spray programme has been made public by the Pathologist. The brown rot experiments are being concluded this month. These were chiefly carried out in the Goulburn Valley. Fruit picking in this experimental work is being commenced immediately.

Canning Peaches.—Harvesting of canning Peaches in the Goulburn Valley is now being proceeded with. The crop is good, and judging from present indications, the crop of Pullar's Cling is going to be a large one.

Viticulture.

Wet weather has done a good deal of damage to the Grape crop, which will fall short of expectations. Downy mildew is responsible for much of the shortage. Vineyards not sprayed at the right moment or in sufficient quantity have suffered a good deal. In some cases stalk mildew has caused many berries to drop, and foliage is suffering in varying measure. There is less brown rot than might be expected.

Oidium, which threatened at one time, responded to sulphuring, which was freely applied with good results. It is too early to estimate the injury done by the rain. Sultanas were expected to be about 20 per cent. below last year's pack, but the shortage will probably be rather more than this.

Citrus.

The citrus crop continues its normal development and there is no outstanding feature to comment upon. Good quality Valencia Late Oranges continue to arrive in small quantities, a large proportion has had to be colored artificially by the ethylene gas process. Generally speaking the quality of the Late Valencias is slightly lower than usual.

* * *

Beechworth. — At the annual Presbyterian show, opened by Mr. Zwar, M.L.C., on April 17, Grapes, Apples, Pears, Figs, Lemons, Passionfruit, and Almonds and Walnuts were displayed. Principal award winners were: Miss A. Orton, Downs Bros., Mrs. Christensen, B. Rhodes, C. Ahrens, Mrs. J. Shennan, Mrs. T. Crossman, Miss Dalgleish, and G. Wareham.

* * *

Bunyip.—Excellent fruit was on view at the recent Bunyip Show. Amongst the prizewinners in the fruit section of the show were Messrs. R. Nash, F. A. Nash, W. Wilson, L. Lamble, A. Blessie, and Gardiner, and Mesdames Chorley and McDonald.

E. Burwood.—There was a good attendance at the March meeting of the E. Burwood Fruitgrowers' Association, when Mr. Basil Krone, fruit packing expert of the Department of Agriculture, gave an Apple packing demonstration in the Canadian standard and Australian dump case. Among those present were several boys who are members of the Young Farmers' Club at the E. Burwood State School.

Messrs. F. W. Fankhauser, Crittenden, J. Tainton, senr., F. Beet and Cr. W. R. Tainton, were appointed to attend the Farmers' Convention at Shepparton.

* * *

Harcourt.—The Harcourt irrigation system has been considerably improved during the last three years. Wooden flumes have been replaced by concrete syphons, an open cut was made at Lang's tunnel, and the bad, leaky patches have been cleared up. The older established orchards, also the newer ones at Harcourt North, are in good heart.

* * *

Kyabram.—There is much activity at the local cannery; a high quality pack is being put up.

There has been serious damage this season due to codlin moth, brown rot, and the Oriental Peach moth.

Losses by pests and diseases reduced the fruit crops by 50 per cent.

* * *

Kyabram.—The directorate of the Kyabram Co-operative Fruit Preserving Co. Ltd. recently decided to increase growers' quotas of late Peaches by 40 per cent. following a deputation, including Messrs. W. F. Cooper and T. Hughes, of the Lancaster Fruitgrowers' Association, Messrs. A. Bedford and L. Evans, of the Kyabram Association, and Mr. F. S. Salter, of the Merrigum Association. After deducting losses from brown rot, practically the whole of the remaining crop will be processed. Much damage has been caused in this district both by Brown Rot and the Oriental Peach Moth.

* * *

MILDURA.

Three years ago the Mildura Co-operative Co. arranged to carry on Citrus processing, and appointed Mr. Dyason as manager of the department. This department is now employing nearly 80 hands, and manufactures candied peel, marmalade, fruit-chutney, Lemon butter, Worcestershire sauce, Fig, Apricot and Plum jams, and Tomato soup, all of which are popular lines with the wholesale and retail trade, also the housewife. The goods are marketed under the "Padlock" brand.

* * *

Panton Hill.—At the March meeting there was a discussion regarding the "green ticket" system of allotting stands at the Victoria Market. Details had been placed before Mr. W. H. Everard, M.L.A., and a report from him was awaited.

Panton Hill.—At the Panton Hill Fruitgrowers' Association's show, held on March 19, which was opened by Mr. W. H. Everard, M.L.A., Mr. A. Herbert acted as judge for the fruit section, and Mr. A. N. Jones for the flower and vegetable sections. The fruit displayed was of pleasing quality, and included Apples, Pears, Quinces, Strawberries, and Tomatoes. Prominent among the Apples were Jons., Stewarts', G. Smith, Del., etc., and in Pears were noted Packhams, Keiffers, and others. Prizewinners included: E. Pill, A. Barber, G. J. Smith, C. Harris, A. Duff, E. Smith, S. A. Cracknell, H. Masefield, J. Howard, Bob Duff, Miss J. Duff, Messrs. K. and L. Smith.

* * *

Diamond Creek. — Congratulations to the Diamond Creek Horticultural Society on having celebrated its jubilee. Among the prizewinners for fruit at the 1885 show were Messrs. E. T. Peers, L. Lawrey, G. Gray, E. Jones, W. Duncan, A. Harrison, R. Sharpe, J. Scotland, R. Wadeson, and J. Herbert. The president was Mr. E. H. Cameron; vice-presidents Messrs. Peers and Jones; secretary, F. Flintoff.

* * *

Quantong.—Fruitgrowers at Quantong estimate their losses of fruit during the recent heat wave at between £4,000 and £5,000. About 20,000 cases of fruit were damaged.

* * *

E. Ringwood.—There was a nice display of fruit, flowers and vegetables at the fete at the E. Ringwood State School on March 17 by members of the Young Farmers' Club. Violet Coventry won first prize for packing Jonathan Apples.

* * *

Mr. R. P. Coventry, of Ringwood E., is arranging to organise an Apple packing class among local children.

* * *

Ringwood Show.—The committee for the Ringwood Fruit Show invites the co-operation of the fruitgrowers, and asks that they will put aside specimens and trays of Apples and Pears for exhibition, and thus make it once more the show of the State. Show date: April 11.

* * *

Wandin. — The autumn show of the Wandin Horticultural Society on March 10, was successful. Exhibitors are to be congratulated on the excellence of the fruit. Apple varieties included Jonathan, Five Crown, Stewarts, Delicious, etc. Pears: W.B.C., B. Bosc., Jos., Packhams, Winter Cole, etc. Other fruits included Plums, Passionfruit, Cape Gooseberries, Grapes, etc. Among the prize-winners were F. and A. Henderson, E. H. Wallace, E. Holmfield, Burgi Bros., J. Wallace, Messrs. P. and E. Anker, P. Jacob,

---

Gracie (proudly): "I suppose you know dear, that my father is a Member of Parliament?"

Sam: "Never mind, darling, I love you too much to let that stand in our way."

G. Risebrough, J. Howell, L. G. Sebire, A. R. Wallace, A. Andrews and Son. The prize for best case of Jonathan Apples for export to United Kingdom, in Australian softwood or hardwood dumps, was won by B. Burgi. Exhibits from the members of the Young Farmers' Club were highly creditable.

CAPTAIN COOK'S COTTAGE COMING TO VICTORIA.

When Prince George visits Victoria in October next he will probably see Captain Cook's Cottage, which has been purchased for the Victorian Public, and which is travelling half-way round the world at present. It was packed into 1,000 cases, and carried to Hull by the London and North Eastern Railway, and is at present being shipped to Australia on board the Commonwealth and Dominion Line vessel, "Port Wellington."

Every piece of the cottage has been marked for reassembly, and sectionalised charts will enable the Australian craftsmen to rebuild the cottage without difficulty; even the Ivy which covered one of the walls of the cottage, is being transported.

HEAVY TOLL OF CODLIN MOTH.

Is Arsenate of Lead Becoming Less Effective.

The heavy toll taken by the codlin moth this season has caused many growers to enquire as to whether arsenate of lead is becoming less efficient or if grubs are gradually becoming immune. There is certainly room for research work in connection with the codlin moth. Entomologists not only here but in U.S.A. and other parts of the world, agree that so far nothing has come along to take the place of arsenate of lead as a spray. There is no evidence to show that the grub is becoming immune. Under certain seasonal conditions with high temperatures the grub is more virile than under other circumstances: it would appear that the 1933-34 season has been a "bad" one as regards grub infestation.

ORCHARD AND GARDEN FERTILISERS.

Valuable Book Issued Free by Nitrogen Fertilisers Pty. Ltd.

There are very few orchardists, if any, to-day, who would not agree that manuring was a considerable item in the cost of production of fruit. Therefore, at a time when costs have to be cut to offset low price realisations, manuring comes up for serious considerations.

Most growers know that to cut out the item would be to cut down production and, in most cases, out of all proportion to the actual saving effected by the elimination of the expenditure. But, not as a rule having had a scientific education or had the opportunity to specialise in soil science, very few have more than a hazy idea of how a reasonable sum of money should be best expended to obtain the maximum efficiency from manurial treatment.

Such being the case, any ideas put forward by men of some scientific standing are usually greatly appreciated by orchardists. Such appreciation will, we are certain, be extended to Mr. R. A. Boyle, M.Sc., horticultural advisory officer to Nitrogen Fertilisers Pty. Ltd., for his very valuable treatise entitled "The Application of Fertilisers to the Orchard and Garden," and to his principals for making this book available to growers. The author emphasises the difficulties presented by orchard manurial treatment in comparison with that of field crops, and he brings into prominence an unfortunate truth, and that is the crying need for more and better equipped horticultural research stations in the Commonwealth.

Mr. Boyle is well known to many of our readers, and those who have had the pleasure of listening to his talks and lectures on the subject will again recognise in this book his ability to express himself in an interesting and intelligible manner.

Every orchardist and gardener should obtain a copy of this work, which is issued free of charge, on application to Nitrogen Fertilisers Pty. Ltd., 360 Collins-street, Melbourne. The book contains 77 pages, together with eight fine art illustrations, and a number of interesting photos. in the text. It is a very welcome contribution to the welfare of the fruit industry.

BRITISH FRUIT TRADE.

Lord Mayor Attends Fruiterers' Dinner.

The dignity of the fruit trade in London was emphasised when on January 26 the Worshipful Company of Fruiterers held the Livery Dinner under the chairmanship of the Master. The principal guest was the Lord Mayor of London and Sir Frederick Keeble, Sir William Lobjoit, Mr. H. V. Taylor (The Horticultural Commissioner at the Ministry of Agriculture), Mr. F. R. Ridley, were among the guests.

* * *

As regards the "livery" aspect, the report does not state whether this was an exterior or interior matter. However, it is certain that the fruit trade places sufficient importance on its operations to have the Lord Mayor of London at its function.

IMPERIAL FRUIT SHOW, BRISTOL.

At the Imperial Fruit Show, which was opened by the Duke of York, at Bristol, towards the close of last year, there was displayed fruit from all parts of the Empire, including Australia, Canada, South Africa, Malay, and Cyprus. Messrs. Geo. Monro Ltd. and T. J. Poupart Ltd. were amongst the many exhibitors in the Trade Stands Section.

Australia, for the first time, exhibited a sample of Navel Seedless Oranges, from New South Wales, Victoria, and Western Australia, and in the opinion of the trade this fruit has undoubtedly a good future in the U.K. An impressive show was made with dried fruits, such as Sultanas and Raisins, but, owing to the season, it was impossible to show Apples and Pears, which are so well known on the British markets.

Fruit Trees of Outstanding Quality

True to name, healthy and well-rooted. Citrus trees in large quantity—
Budding Wood supplied by the Bud Selection Society of N.S.W.—
Worked on Lemon, Sweet Orange, and Trifoliata Stock.

LARGE QUANTITY OF GRAFTED PECAN NUTS OF 12 VARIETIES FOR SALE THIS SEASON.

CATALOGUE FREE ON APPLICATION. ESTABLISHED 1901.

L. P. ROSEN & SON, Fernhill Nurseries

Pennant Hills Road, CARLINGFORD, New South Wales Phone: Epping 96

Personal.

Mr. S. M. Bruce, Australia's High Commissioner in London, is now in Australia for a brief period to assist in finding a market for Australia's products. Owing to a wave of "nationalism" among the nations, Britain was adopting the same policy, in co-operation with her overseas dominions. "Australia's best export market is the United Kingdom," states Mr. Bruce.

* * *

Mr. Harold Clapp has left for a nine months' visit abroad, including the U.S.A. It is all to the good that this highly placed public servant should have close firsthand contact with what is happening abroad. We hope he will fall in love with the American fruit pies —the best in the world—and come back determined to start a fruit pie campaign in Australia.

Growers don't yet realise it, but this fruit pie business is real: if our people got the fruit pie habit it would rehabilitate the fruit industry.

* * *

Mr. A. E. Hyland, director of Australian trade publicity in London, in a recent letter to the "Fruit World," states he is looking forward to the visit of "Billy" Woodfull and his noble band of cricketers, to assist in boosting Australian Apples and Pears in U.K.

* * *

The name of Mr. W. J. McCarthy was favorably mentioned at the Sydney meeting of the Australian Apple and Pear Export Council as a suitable representative of the Council to attend to claims for damaged cargoes. It is pleasing to note that Mr. McCarthy was the one who prepared the evidence for the receivers of the fruit in the recent successful "Hobsons Bay" case.

* * *

Mr. L. M. Shoobridge, of Hobart, visited Victoria in March to go on a tour of the Western District with the Victorian Tree Planters' Association. Despite his 83 years of age, Mr. Shoobridge is still vigorous and hearty. In the years gone by he was a noted worker for the fruit industry.

* * *

Mr. Jos. Jordan was congratulated at the Somerville Show on March 14 on having judged the fruit each year consecutively at Somerville for 38 years. Jos. is as cheery as ever and appreciated by all who know him.

* * *

Appreciation of the services of Mr. H. Lake on behalf of the Western Australian fruitgrowers, was expressed at the recent meeting of the Bridgetown Fruitgrowers' Association. As President of the Bridgetown Association, Mr. Lake gave valued help. It was regretted he was not standing for election again as President.

* * *

Mr. A. R. Townsend, Chairman of the Fruit Industry Sugar Concession Committee, who has been visiting the various canneries and growers' organisations to investigate the canned fruits position, addressed meetings in various parts of N.S.W. and Victoria during March.

The Australian consumption of canned Apricots, Pears and Peaches had declined from 1,000,000 cases to 600,000 cases per annum.

* * *

Mr. H. G. Colombie, in a letter to the Editor, states that after giving careful consideration to numerous and increasing individual and collective requests that he be present in Australia to act as consultant and adviser during the period of reconstruction of organisations connected with the fruit industry, he has agreed to defer his visit to Europe. He accordingly cancelled his passage by the s.s. "Orford" for March 20.

* * *

Mr. H. Barnes has been appointed as Director of Fruit Culture in Queensland in succession to the late Mr. G. Williams. Mr. Barnes has been acting Director for the past 12 months. When announcing the appointment, the Minister for Agriculture and Stock, Mr. F. W. Bulcock, paid a tribute to the good work done by Mr. Barnes.

* * *

Mr. Geoffrey W. Brown, President of the Victorian Fruit Marketing Association and the delegate of the Australian Apple and Pear Export Council, to the Empire Fruit Conference arrived in London, per S.S. "Mongolia" in mid-March.

Mr. Brown has an important mission to fulfil, and his report will be awaited with keen interest.

* * *

Mr. W. Le Gay Brereton, an expert of the N.S.W. Agricultural Department, made a tour of inspection of the Mildura irrigation settlement and the various packing sheds recently, and was pleasantly surprised at the extent of the development of the industry and the modern methods for processing and packing.

* * *

Mr. J. L. Provan, Horticultural Research Officer, Victorian Department of Agriculture, has specialised in citrus culture and his services are highly esteemed. The Department has a citrus experimental plot at Mildura, and Mr. Provan is conducting tests with stocks.

* * *

Dr. R. J. Tillyard, who was chief of the division of economic entomology of the Council for Scientific and Industrial Research, Canberra, recently resigned owing to ill-health. As the Council is anxious not to lose his services, he will probably accept a post involving research work only when his health has improved.

Dr. A. Nicholson is at present acting chief in Dr. Tillyard's place.

* * *

Mr. J. W. Bailey and others are co-operating with Mr. Boas, of the Council for Scientific and Industrial Research in the shipping of fruit in what is known as the 9 in. dump case. This is the case which Mr. Boas and his officers brought before the Australian Apple and Pear Export Council at its last meeting in Sydney.

* * *

At a meeting of the Victorian Dried Fruits Board, at Mildura early in March, there were in attendance Messrs. J. M. Balfour (chairman), E. Meeking (Dept. of Agriculture), H. V. Davey, A. Rawlings, and S. R. Mansell.

PINEAPPLE DISEASE INVESTIGATIONS.

Investigations are being carried out in Queensland by Mr. H. K. Lewcock, Pineapple Pathologist, with regard to black heart in Pineapples. The experiments have indicated that black heart is caused by the sudden withdrawal of water from the fruit during ripening. As this view conflicts with the opinion that severe cold is the primary cause of black heart, experiments are being carried out with cold storage. The fruit, which had been in storage for ten days with an average air temperature 38 deg., opened up in splendid condition. The fruit which had been stored for 14 days at 38 degrees F. and then placed in a chamber at 54 deg. F., did not open up nearly so attractively as the first, the skin being dull in appearance, and some of the fruit were weeping slightly. After being stored for 31 days at an average air temperature of 41 degrees F. the flesh was dull in appearance, but there were no indications of black rot.

Fruit stored at 54 deg. F. for 31 days was slightly over-ripe, but the flesh was bright and attractive in appearance, and the flavor was normal and agreeable. The fruit removed from cold storage after 51 days at an average temperature of 41 deg. F. was no longer palatable, being of a bitter and intensely disagreeable flavor. The fruit stored for 51 days at 54 deg. F. was considerably over-ripe and many were partly decayed.

The experiments showed that black heart of Pineapples is not initiated by low temperatures. There may be some significance in the fact that the only two fruits to develop black heart were also the only fruits to suffer from a water loss in excess of 10 per cent. of their original weight.

Appreciation has been expressed for the services of Messrs. Birt & Co. Ltd., S. Brisbane, for cold storage facilities during the investigation.

Removal of Arsenical Residue from Apples.

Tests With Sodium Carbonate.

Because of the difficulty experienced in removing the residue from combined arsenate of lead and oil sprayed Apples by the use of hydrochloric acid, and of the fact that, under certain conditions in the United States, a solution of sodium carbonate has displaced hydrochloric acid as a washing medium, the trials conducted by the N.S.W. Department of Agriculture last season at Bathurst Experiment Farm included tests with sodium carbonate solutions.

The fruit used in these tests was of two kinds:—

(1) Senator Apples, which had been given a spray programme consisting of one calyx and five cover sprays of arsenate of lead plus calcium caseinate.

(2) Delicious Apples which had received one calyx spray of arsenate of lead plus calcium caseinate, and five cover sprays of arsenate of lead plus summer oil, plus calcium caseinate.

Arsenate of lead 24 oz. to 50 gallons, summer oil 1 per cent., and calcium caseinate 1 lb. to every 100 gallons were the proportions used. The fruit thus carried the average amount of arsenic likely to result from the programmes adopted.

The dips consisted of sodium carbonate solutions of two strengths, viz., 8 lb. of carbonate to 8 gallons of water, and 12 lbs. of carbonate to 8 gallons of water, and a 1½ per cent. hydrochloric acid solution for the purposes of comparison. All fruit in these tests was immersed in the wash liquids at a temperature of 108 degrees Fahr. for one and a half minutes.

Arsenic determinations (in grains arsenious oxide per lb. of fruit) were made on Apples which had undergone washing treatment, and also on controls which had received the same spray programme, but had not been dipped.

The 1½ per cent. hydrochloric acid solution removed 90 per cent. of the arsenic from the Apples sprayed with arsenate of lead alone (.0767 grains arsenious oxide per lb. was the mean of the undipped fruit), and the residue in most cases was below the world trade tolerance limit of .01 grains per lb., the mean figure being .0072 grains.

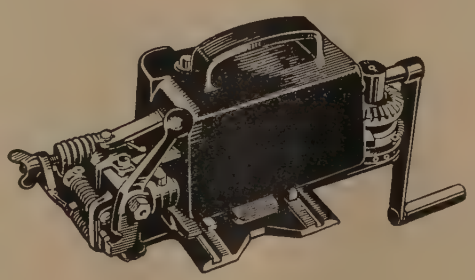
The sodium carbonate solutions were almost equally as effective as 1½ per cent. hydrochloric acid in removing the arsenate of lead alone—only being 2 per cent. less effective—and the mean residue remaining was just below the trade tolerance figure—.0089 and .0091 grains arsenious oxide, respectively. Hydrochloric acid (1½ per cent.) was not satisfactory where the Apples had been sprayed with white oil combined with arsenate of lead, only 78 per cent. of the arsenic being removed, and the amount remaining being in all cases above the trade tolerance, the mean figure being .0163 grains arsenious oxide.

Contrary to expectations, the sodium carbonate solutions were less effective than the acid dip in the case of Apples sprayed with arsenate of lead plus oil, the amounts of arsenic remaining (.0254 and .0202 grains respectively) being considerably over the specified trade limit.

Importance of Hull.—Attention is directed to the Port of Hull, by the following fruit imported for the Christmas trade:—19,687 cases of Apples and Pears from Pacific Coast ports, 110,518 cases of Oranges from Jaffa and Valencia, 2,569 cases of Grape-fruit from Jaffa, 425 bags of Hazelnuts from Jaffa, 100 bags of Almonds, 6,972 cases of Onions, 2,338 cases of Lemons, 3,388 cases of Mandarins, 219 cases of Pomegranates, 1,385 cases of Tomatoes from Valencia and the Mediterranean ports, 25,680 cases of canned fruit from Pacific coast ports, 40,604 cases of dried fruit from Valencia and Grecian ports. In addition, the "Salatea," the "Alfa" and the "Jenny" brought 47,579 cases of Oranges, Grapes, etc., from Valencia, while the "Andalusian" and the "Thurso" 26,000 cases of Oranges from Jaffa.

Fruitgrowers - - Canners - - Exporters

Python Service is embodied in the All-Australian Machine—Invention, Manufacture & Materials



EFFICIENCY	Hand-automatic, giving a uniformity of tension on every wire tied.
LOW RENTAL	With no further costs.
EASE OF OPERATION	THREE turns of the handle completes the tensioning, twisting and cutting.
SUPERIOR STRAPPING	A perfect tie with both ends turned down.
REDUCTION OF COSTS	Six ties for one penny.
NO WIRE RESTRICTIONS	Purchase your wire in the best market.
NO RENT FOR ACCESSORIES	Spools and stands for wire are supplied for your convenience.

Python Wire Strapping Pty. Ltd.

21 Howard St., North Melbourne 'Phone: F 2708. :: 42-44 Meagher St., Chippendale, Sydney 'Phone: MA 4392.

Sole Agents:—H. JONES PTY. LTD., Hobart and Launceston. GOLLIN & CO. PTY. LTD. South Australia

Citrus News and Notes.

N.S.W. Citrus Crop.

Good Crops Anticipated—Heavier than Last Season.

The following information regarding the 1935 Citrus crop is to hand from Mr. A. A. Watson, Director of Marketing, N.S.W., 1/3/34:—

Weather conditions, particularly in the coastal areas, generally have favored Citrus groves.

The Valencia crop appears outstanding, and high prospective yields appear to be fairly general. It is noted that both common Orange and Mandarin trees are being removed from many orchards, noticeably in the Gosford district, as growers have in the past found returns from these varieties unremunerative.

On present indications, the Orange crop yield will be considerably higher than that of last season.

The forecast harvest, as particularised hereunder, refers to that at present in sight; any subsequent adverse conditions are likely to reduce yields.

Oranges—		
Navels	820,000	
Valencias	1,140,000	
Common and Others	350,000	
		2,310,000
Mandarins		460,000
Lemons		290,000
		3,060,000

Gosford. — The Valencia crop is outstanding, and heavy yields are indicated: trees in good condition, fruit sizing satisfactorily. There is a good quantity of intermediate crop fruit in some groves.

Navel crop varies considerably, but is generally fair. Crop on young trees heavy in some localities. In the Somersby centre, although there was a good setting, a general shedding has taken place, resulting in patchy crops.

Joppas lightly cropped in some groves, heavy in others: fruit much larger than usual at this stage of growth. Many Common Orange trees have been removed or budded over to Navels.

Mandarin crop light: heavy shedding in the Lisarow area.

Lemons light to heavy in some groves, however, no main crop fruit set. At Peats Ridge, old trees that have been pruned are very lightly cropped, while young trees are fairly heavily cropped.

Wyong.—Season good. Anticipated that Navels will be 50 per cent. greater than last year. Crops generally heavy; fruit developing well.

Valencias are expected to considerably exceed previous season. Common and other Oranges and Mandarins normal, but the Lemon crop light.

Windsor-Richmond.—Navel crop patchy, and lighter than last season. The Valencia, Common and other Oranges generally fair; fruit expected to size well.

Although a reduction in the area under Mandarin trees has been made, a large quantity of fruit will be available. There is a very good crop of Emperors; this fruit is commencing to fill out.

Hills District.—The Navels are lighter cropped, but the fruit is of a larger size. All reports indicate heavy crops of Valencias.

Although setting erratic, the ultimate crop of Common and other Oranges should exceed that of last season. In some locations, noticeably on Joppa and White Siletta trees good to heavy yields are in sight.

Owing to irregular setting and a reduction in the area of bearing trees, there will be a lighter crop of Sevilles this season. The weather has been very favorable, good development of fruit anticipated.

Mandarins light, Lemons, although light in some groves, are expected to aggregate a slightly heavier crop.

Grape Fruit trees are carrying good crops in groves which have received the necessary attention. The trees on the greater part of the area have not reached the productive stage.

Kurrajong.—Fair to medium crop of Navels owing to patchy setting. On young trees good crops have set. Very light to medium yields are in view on aged trees.

There are good crops of Valencias on trees in well-cared-for groves. Generally fair to good yields are expected.

A patchy setting of Common Oranges is reported. In the Bilpin centre the trees failed to bloom, owing, it is thought, to the heavy crop of fruit being carried at the blossoming period. Occasional good crops of Joppas are to be seen. The Seville crop is growing well, but yields will be light. Good crops are in sight at Grose Vale. Mandarins set well, but a considerable shedding reduced prospective yields. Lemon crop generally is good. Fair to medium crops of Grape Fruit are showing. The area planted to these trees is not extensive.

Hawkesbury.—The yields in this centre will not average those of last season. Valencia and Common Oranges are developing satisfactorily, and although prospects indicate generally lighter yields, good to heavy crops are to be seen in some groves. A lighter crop of Mandarins has been set. The fruit is fairly free from markings, and it is expected that the quality will be good. Lemon, Seville, Orange and Grape Fruit trees are carrying fair, and, in some instances, heavy crops.

Hunter-Manning. — Crops generally patchy. Valencias are carrying most fruit: Seedling Oranges, and Lemons are mostly light, Mandarins fair.

There is a good Navel crop in the Bulga centre, some of the fruit is coloring. Valencias are heavily cropped, and are developing well.

Parramatta. — The Navel trees blossomed irregularly, but practically a normal crop has set. In the Emu Plains locality most groves have medium to heavy crops in sight; reports indicate satisfactory development.

Valencias medium. A number of trees are carrying very little fruit at Seven Hills.

Good development of Common Oranges is apparent. Satisfactory crops are showing in some locations, but only light yields are anticipated in others. Numbers of trees have been removed during recent months.

The Mandarin crop is very irregular; some trees have failed to set any fruit, whilst a normal crop is in sight on others. Many trees have been cut out, and in others the trees have been headed right back.

Lemon trees generally are in good condition, and the fruit is developing satisfactorily. The fruit is scalded in some groves. At Emu Plains only light crops are being carried, the trees not having fully recovered from the frost damage of two years ago.

Narromine.—Navels irregular; many big trees failed to bloom in the spring. Valencias, Common Oranges and Mandarins light. Good yields of Lemons and Grape Fruit are indicated.

Forbes.—The dry weather at the end of last year gave Citrus trees in this district a severe set-back. A new growth was apparent after the heavy rains in January. Both Navels and Valencias are carrying very light crops, whilst Common and other Oranges are mostly a failure. There was a light setting of Mandarins, and the Lemon crop has failed.

Murrumbidgee Irrigation Area.—In the aggregate, a lighter crop of Navels

? ? ? ? ? ? ? ? ?

QUERIES QUESTIONS DOUBTS

As to the Best Outlet for Your Fruit
can be dispelled by consigning it to

T. J. POUPART LTD.

COVENT GARDEN
LONDON, W.C.2.

SOUTHAMPTON BRISTOL LIVERPOOL HULL

Account Sales rendered are the best test of Salesmanship. On that test we have emerged from obscurity in 1895 to world-wide repute in 1933

Separate Department for Dried and Canned Produce and Pulp.

— AT —

SPITALFIELDS MARKET
London, E.1.

Tasmanian Growers ship through Eric Burgess Pty. Ltd., 88 Collins Street, Hobart.
Victorian Growers ship through Fred J. Andrew, 416 Little Collins Street, Melbourne.
New South Wales Growers ship through C. Geo. Kellaway & Son, Office 42, City Fruit Markets, Sydney.

is in sight when compared with that of last season. Reports show that rather large fruit is likely to be harvested. Valencia prospects are for heavier yields than last season. Only light crops of Lemons are in sight, owing to the damage from frosts during recent winters.

Curlwaa.—Trees generally are in good condition, and all crops promise yields above average. Fairly large areas are coming into bearing at Barham, Koraleigh, and Curlwaa, with the result that the aggregate crop should exceed that of last year.

There were riots by fruit pickers and sustenance men at Renmark, Barmera, and Berri during March. The law-abiding section of the populace resents these unwarranted intrusions.

MILDURA.

Citrus Root Stocks.—Experiments are being conducted to ascertain the effect of various root stocks in the production of Oranges on a block of land at Mildura, recently acquired by the Agricultural Department. Mr. J. L. Provan, the Research Officer, stated he was well satisfied with the growths that have taken place in the various trees on which budding work has been carried out.

In irrigation conditions in Victoria sweet or sour Orange rootstock was recommended for Oranges. The most suitable conditions for Washington Navels were in the hot dry interior of the State, principally along the Murray River. The minimum of water necessary to keep a tree in perfect health and vigor should be used in irrigation if growers would produce perfect fruit.

CITRUS IN CALIFORNIA.

The general manager of the California Fruit Growers' Exchange, Mr. Paul S. Armstrong stated that during the year ended October 31, 1933, 75,383 carloads of Oranges, Lemons and Grapefruit were marketed, bringing a total f.o.b. return of about £13,700,000; 56,079 carloads of this fruit was marketed by the Exchange.

Of the £21,264,335 delivered value of the citrus crop £7,562,388/10/- went for freight and refrigeration.

The shipments of Oranges for the year totalled 58,866 cars, of which the Exchange handled 41,619. All except 1,577 cars of the Lemon crop of 14,812 cars were handled by the Exchange. The Grapefruit shipments were 1,705 cars, of which the Exchange handled 1,225.

A net saving in expenses of £29,000 is reported by the Exchange.

The only citrus crop that made a compensatory return per acre to the producer in the past year were Lemons. The fact that since 1925 the Lemon industry has operated under a pro rata agreement appears to be the reason for this favorable situation.

Orange Exports to U.K.

Mr. Vagg's Report Re Rough Handling Challenged.

(The Editor, "The Fruit World.")

Sir,—In your issue of March 1, you published a report from Mr. J. S. Vagg regarding his investigations into Citrus shipments to England last year. In this there is such a distinct misstatement regarding the discharging of the "Buteshire," that I must ask you to reproduce the answer to it by those most concerned.

Yours etc.,
A. W. PEARSE
(Representative Port of London Authority.)

Sydney, 20/3/34.

The Traffic Inspector of the Tilbury Dock, writes under date, February 1, 1934:—

Oranges ex ss. "Buteshire."

The ss. "Buteshire" broke bulk on October 25 last, and, as the various consignments of Oranges were overstowed in the ship's hold, the discharge by Scruttons Ltd. was delayed, and did not commence till 8 a.m. on the day following.

I am not aware what happened in the ship's hold, but from the time the cases were in the crane slings to the time they were brought ashore for delivery to rail I was present, and supervised the handling and receiving.

Mr. Vagg was present during the whole of the day, and spent practically the whole of the time opening various cases and extracting single Oranges for analytical purposes. I introduced myself to him early in the morning, and during the course of several conversations no mention was made of any complaint.

One large consignment, account J. Travers & Sons Ltd., was in a very wasting condition when landed, and was subsequently destroyed.

I attach a statement showing the various consignments that were delivered to rail, and it should be noted that 4,594 cases were delivered direct overside. Out of the total quantity landed, 3,030 cases were delivered direct to railway wagons alongside the ship. The remainder, 1,598 cases, were temporarily lowered into the divisions, and delivered on the following day.

The handling of the fruit was performed entirely by Scruttons Ltd. for the shipping company on our behalf, and I am of the opinion that Mr. Vagg's statement is altogether unjustified.

(Sgd.).....
Traffic Inspector.

Oranges ex ss. "Buteshire"—River Cargo Jetty.

(Giving names of Merchants, number of cases and how signed for.)

J. Travers & Sons Ltd., 638 cases, 3 cases Dock-coopered, all wasting, destroyed by Port Sanitary Authority; Geo. Monro Ltd., 1,908 cases, 11 cases dock-coopered, 1 case repacked; Connolly, Shaw Ltd., 220 cases, 1 case dock-coopered; Ed. Jacobs, 462 cases, 6 cases dock-coopered; H. Lyons, 145 cases, 5 cases dock-coopered; Guerra & Co., 342 cases, 3 cases dock-coopered, 16 cases slightly wasting; E. Bevington, 428 cases, 4 cases dock-coopered, 1 case repacked; Co-operative Wholesale Society, 500 cases, 8 cases dock-coopered. Cases delivered, 4,628. Delivered overside, 4,694. Total, 9,222 cases.

(Sgd.).....
Traffic Inspector.

It will be observed from the small number of re-opened cases that as regards the 4,628 packages that passed the Port of London Authority's hands, that there is no justification whatever for Mr. Vagg's complaint.

Copy of letter from Capt. A. W. Postle, Dock Superintendent, Scottish Shire Line, Tilbury Dock, to F. Bedford, Esq., General Manager, Messrs. Cayzer, Irvine & Co. Ltd., London:—

"Clan Line,"
Tilbury Dock,
January 25, 1934.

Ss. "Buteshire."
Discharge of Oranges — Tilbury Deep Water Jetty.

Dear Sir,—In reply to letter of 23rd inst., from Mr. Paterson, requesting me to report to you about the discharge of Oranges, and the statements of Mr. J. S. Vagg regarding rough handling during discharge, I beg to report that these 9,222 cases of Oranges were discharged ex the "Buteshire" on wooden trays in the same manner as all fruit from Australia and South Africa is handled, and great care and attention was given to discharge and delivery. Large boards were put down in the holds on the working height, and rollers were used to pass the cases from wings and ends into the hatch square for sets to be made up.

The men employed on the "Buteshire" and the jetty are all "permanent" hands of Messrs. Scruttons, and are well accustomed to handling fruit from all sources.

The Oranges were delivered, 4,594 to craft and 4,628 to rail per Port of London Authority, and clean receipt was obtained for them, with the exception of 108 dock-coopered and for clauses relating to perished Oranges. Thus, the percentage of dock-coopered packages was slightly over 1 per cent., which is, in dock experience, a very good outturn for any cased goods, and it should be noted, that all these packages passed through a very thorough scrutiny prior to delivery.

Mr. Vagg made no complaint or observation to me, or any of the Clan Line staff, neither did he make any comment to any of Scruttons' people at the time of discharge. Some of us were there all the time, and I cannot understand how he could remain silent if his observations

Fruit
Brokers and Auctioneers
"FRUCHTHOF"
Hamburg Germany

Consignments of Apples and Pears Solicited

Ph. Astheimer & Sohn
Cable Address: Agrumi

Gustav Bey
Cable Address: Gusabey

Int. Frucht-Imp Ges.
m. b. H.
Cable Address: Frugalis

J. H. Lutten & Sohn
Cable Address: Luttenson

Aug. Stier
Cable Address: Frutero

Timm & Gerstenkorn
Cable Address: Timmkorn

Firms Listed in Alphabetical Order.

The **"Fruchthof"** (Fruit Exchange) **Hamburg,** Germany
Offices and Salerooms of the Six Leading Fruit Brokers of Hamburg
No Other Brokers and Auctioneers Selling in the "Fruchthof"

HAMBURG
The Biggest Port on the European Continent

For Information apply to anyone of the above mentioned six firms

or opinions were such as he describes. His remarks, per press cuttings, are grossly inaccurate, and exaggerated, and disclose a total ignorance of fruit handling methods in the Port of London.

Yours faithfully, for the Scottish Shire Line Ltd.,

(Sgd.) A. W. POSTLE,
Dock Superintendent.

Renmark.—At the annual meeting of the Renmark branch of the Murray Citrus Growers' Association, addresses on the various activities of the Association were given by Messrs. F. H. Metters (president), C. Mueller (N.Z. Representative), and N. H. Underwood (general secretary).

The retiring committeemen, Messrs. C. J. Katekar, F. J. Olorenshaw, J. H. M. Price, F. L. Lang, and H. C. Kempe, were re-elected. Messrs. F. L. Lang and H. C. Kempe, who were not present, did not desire to stand again, but the committee were given power to co-opt additional members if they still declined to accept the position when approached again.

Following the recent Council meeting, it had been decided that South Australia should ship 50,000 cases, as against 30,000 cases last season, to Great Britain.

Mr. Mueller strongly urged the devoting of greater attention to the labelling and marketing of cases for New Zealand.

ORANGES AND GRAPEFRUIT.

The value of the Valencia Late Orange for bridging the gap between citrus seasons is mentioned in a report recently issued by the Federal Citrus Council. The Valencia Orange hangs on the tree without losing quality.

Grapefruit is also suitable for these late markets, but the retail trade demands American Grapefruit because of certain rind marks on the Australian product. It is hoped that the trade will quickly recognise the fact that the "blemish" is a skin mark only, caused by rubbing in early stages of growth. The quality of the fruit is unimpaired, and is fully equal to the imported article.

RAPID GROWTH OF CITRUS.

The nurseries of L. P. Rosen & Sons, at Carlingford, N.S.W., have always been noted for good Citrus stock, and many pleasing letters of appreciation from orchardists are received by Mr. J. W. E. Larsen, who directs the activities of the Fernhill Nurseries. A letter recently received from Mr. J. E. Ward, of Yoogali, near Griffith, stated that the rapid growth of 1,000 dormant budded Thompson Grape Fruit was a revelation. These trees were planted last September, and in four months had increased two feet in height. A photograph accompanied the letter, showing the progress made.

Mr. Larsen considers that Mr. Ward has little to learn in growing Citrus if he can bring dormant buds along to such an extent.

There are 40,000 Citrus trees at Fernhill this season, all of which are bud-selected stock. There are 50,000 Peaches, which look particularly healthy, 20,000 Apples, 10,000 Plums, 5,000 Apricots, and smaller lots of other fruits. There are also 40,000 Rose plants of 200 different varieties, and several new varieties of fruits.

Selected Buds for Citrus.

Activity in Queensland.

The budwood scheme of the Queensland Department of Agriculture is now in operation. The C.O.D. is handling the financial side of the scheme for the Department and is attending the despatch of orders.

This scheme should ensure an improvement in the standard of the trees as it will mean that stocks of certain varieties will be from specially selected trees.

In addition the Department is investigating the subject of most suitable stocks and has undertaken the selection of seed for the raising of trees with a view to improving the root systems of the trees at present being supplied by nurserymen.

Better Citrus Stocks.

The view is held in Queensland that not only the scions but the stocks were capable of improvement, and that it was almost useless to aim at better buds without paying more attention to the root system of the tree. As a result the Queensland Department issued a regulation last December prescribing grade standards for citrus trees. The stocks had to be grown from seed selected under the supervision of an inspector, and which have been grafted with scions under the supervision of an inspector.

It was considered that the interstate trade with New South Wales would be affected by these regulations, and the subject was referred to at the Ministers' Conference in Hobart. Conference agreed to allow a fruit officer to visit New South Wales and Victoria to study the citrus bud selection schemes in those States and to collaborate with the officer in charge with a view to consideration of the modification of the scheme in Queensland.

Citrus Culture in Victoria.

That the only Navel Orange which should be grown was the "true-type" Washington Navel, was stated by Mr. J. L. Provan, Horticultural Research Officer, Vict. Dept. of Agriculture, in a broadcast talk from 3AR. Mr. Provan stressed the fact that bud selection was important. He said that selected buds from excellent trees had been sent to growers in all parts of the State, with excellent results. They had been used for converting Mandarins and unprofitable Oranges to good trees, and more than 3,000 trees had been thus reworked in the last three years. More than 120,000 selected buds had been distributed.

Queensland's Big Citrus Crop

50% Increase on Last Year.

REPORTS submitted to the Minister for Agriculture (Mr. F. W. Bulcock) by the Director of Fruit Culture (Mr. H. Barnes) on the prospects of the citrus crop in the various districts, show that the crop for the coming season promised to be exceptionally good.

"The forecast earlier in the season of a 50 per cent. increase will be fully realised in some districts," states the Minister.

In the Gayndah district the crop was well forward and promised to be of good quality and size. The summer crop of Lemons was now being marketed, and satisfactory prices were being realised. In this district the industry was advancing on sound commercial lines, and growers were making negotiations for the establishment of a co-operative packing house, which would add to the good name the district had already built up as a producer of quality citrus fruits.

North Coast Prospects.

On the north coast there was every promise of a big crop also, said Mr. Bulcock. Mandarins were not in heavy bearing, as a severe drop was experienced when the fruit was setting. Nevertheless, growers were looking forward to a good harvest. Although a number of new plantings had been made on the north coast, the total acreage there was not increasing owing to the number of orchards which were yearly going out of production due to unsuitable conditions.

The Tamborine Mountain district expected to market a record crop of excellent fruit this year.

This district, in recent years, had increased its acreage very considerably. Provided weather conditions were favorable during the blossoming period each year, it could be expected to produce in a few years a considerable percentage of the State's annual citrus yield. — ("Courier-Mail," Brisbane.)

BANANA THRIPS CONTROL.

Mr. Robert Veitch, B.Sc., Agr., B.Sc. For., F.E.D., Chief Entomologist, Department of Agriculture, Queensland, has advised growers to dust the fruit at weekly intervals during the warmer months of the year, where thrips infestation occurs. The most effective dust to use in the present state of knowledge is nicotine dust, preferably one in which nicotine is present as free nicotine, although dusts in which nicotine is present as nicotine sulphate can also be used with beneficial results.

Europe's Premier Fruit Brokers

LONDON HULL LIVERPOOL

The WHITE SERVICE

SOUTHAMPTON MANCHESTER NEWCASTLE CARDIFF

WHITE & SON LTD. FRUIT DISTRIBUTORS & MARKETING SPECIALISTS

London Fruit Exchange, Spitalfields, E.1., England

KEELING & WHITE LTD.,
London Fruit Exchange,
Spitalfields, London, E.1.

MORGAN, WHITE & CO.,
Cardiff,
Wales.

ROGERS, WHITE & CO. LTD.,
10-18 Victoria Street,
Liverpool.

NORTHERN FRUIT BROKERS LTD.,
WHITE & SON, HULL Branch,
Humber Street,
Hull.

NORTHERN FRUIT BROKERS LTD.
NORTH OF ENGLAND Branch,
Commercial Sale Room,
Deansgate, Manchester.

WHITE & SON LTD.,
6 Oxford Street,
Southampton.

WHITE & LEATHERLAND,
St. Andrew's Street,
Newcastle.

For Full Particulars Apply to

TASMANIA:	SOUTH AUSTRALIA:	VICTORIA:
H. JONES & CO. LTD., Old Wharf, HOBART.	GEORGE WILLS & CO. LTD., Gilbert House, Gilbert Place, ADELAIDE.	PARNHAM PTY. LTD., Broken Hill Chambers, 31 Queen St., MELBOURNE.
NEW SOUTH WALES:	**WEST AUSTRALIA:**	**NEW ZEALAND:**
BATLOW PACKING HOUSE & COOL STORES, RURAL CO-OPERATIVE SOCIETY LTD., Box 48, BATLOW.	GEORGE WILLS & CO. LTD., 156 St. Georges Terrace, PERTH.	J. A. REDPATH & SONS LTD., 37 Johnston Street, WELLINGTON.

Wastage in Tasmanian Apples held for Mainland Markets

By W. M. CARNE, Division of Plant Industry, Council for Scientific and Industrial Research.

Effects of Cultural and Manurial Practices. Storage at 38-40 Deg. F. Better than 31-34 Deg. F.

A VERY IMPORTANT PART of the Tasmanian Apple Industry is the regular shipment of fruit to the mainland, particularly to New South Wales and Queensland, during the latter half of the year. Owing to the relatively low winter temperatures it is possible to hold a considerable proportion of the fruit in the orchards for some months. The greater proportion is, however, placed in cool storage, where some varieties may be held as late as December.

During recent years, growers and others concerned have been perturbed by a general decline in the storage capacity of the fruit held in Tasmania. This has been due to an increase in breakdown liability. Breakdown, or sleepiness, may develop in the fruit held in the orchards, but more usually in that from cool store. Frequently there is little evidence of its occurrence whilst the fruit is in store or before it has become warmed up. The most serious development occurs whilst in transit to and in the markets and retail shops of the mainland. As the obviously affected fruits are removed when the lines are packed ex store, it is frequently impossible for inspectors to recognise fruit which has become affected, but which has not at the time developed symptoms. Observations in 1932 and 1933, combined with storage experiments in the latter year, have shown that the bulk of the breakdown is of the type known in England, New Zealand and elsewhere as low temperature breakdown. Most of our knowledge of this disorder is due to the work of the Cambridge (Eng.) Low Temperature Research Station, since 1920, though its occurrence in a limited area in California had been investigated as early as 1910. It was recognised in New Zealand in 1926, and was first recorded in Tasmanian Apples in 1933. In England, New Zealand, and in the Parajo Valley of California, the cool stores use temperatures varying between 35 degrees and 39 degrees for susceptible varieties, as compared with the 32 degrees to 34 degrees usual in Tasmania. Though higher temperatures reduce liability to this type of breakdown, they do not necessarily eliminate it. Much depends on the susceptibility of the fruit. Susceptibility in turn depends upon a number of factors, which include the following:

Variety. Varieties differ in susceptibility. C.O.P., Sturmer, Scarlet, Jon. French Crab, and Ribston, are the most susceptible in Tasmania. C.O.P. is grown in England, and C.O.P., Jonathan and Sturmer in N.Z., and in these countries the varieties mentioned are very susceptible to low temperature breakdown.

Maturity of Fruit. Liability increases with the maturity of the fruit up to a certain stage. With still greater maturity liability may fall off, but is usually accompanied by a greater liability to fungal rotting.

Light Crops. Fruit from lightly cropped trees is more susceptible than that from more heavily cropped trees of the same variety grown under similar conditions.

Size of Fruit. Large fruits are usually much more susceptible than smaller, French Crab may be an exception to this.

Seasonal Effects. Susceptibility of fruit from given trees varies with the seasons as well as with the size of the crop and of the fruit. There is evidence that it is increased if the summer is cool and moist, and reduced when it is hot and dry. Climate also plays a part in affecting the size of the fruit, and probably by hastening or delaying maturity.

Soil Type. There is evidence that soil type plays a part in affecting susceptibility in other countries, and observation indicates that this is also true in Tasmania. Experiments to test this have been started.

Soundness of Fruit. Susceptibility is increased if the fruit is bruised or affected with cork or bitter pit. Fruits with water-core are also liable to breakdown, not necessarily of the low temperature type.

Though low temperature breakdown was first tentatively recognised in Tasmanian Apples only as far back as 1927, there is no doubt that it occurred long before. Though no definite data are available as to its incidence in earlier years, there appears no reason to doubt the opinion held by growers and by cool-store men that it has become more serious recently. Various opinions are held as to the cause of this, of which the most important appear to be that the deterioration in keeping capacity is due to one or more of the following:

1. The orchard practises which have very definitely increased the average crop per tree in recent years, and particularly the use of fertilisers, of which the nitrogenous manures have received special emphasis.

2. The general change over during recent years from Bordeaux mixture to lime-sulphur sprays for the control of black spot or scab.

3. Late picking to secure high color in colored varieties. Also late picking owing to uncertainty of the grower as to whether fruit should be exported overseas or held for mainland markets.

Experiments have been designed to test the effect of orchard practices, including pruning, spraying, etc., in co-operation with the Department of Agriculture. Until these have shown definite results, no opinion can be expressed as to the effects of different treatments.

To illustrate the effects of maturity, size of fruit, and storage temperature, some of the results obtained last season in experiments may be quoted. The figures for wastage given on page 187, are those obtained three weeks after the fruit was removed from cool storage. This is approximately the period necessary in Hobart to give results comparable with those which would have been obtained if the fruit has been shipped to mainland markets, and consequently exposed to higher temperatures than it would experience in Tasmania.

It will be noted that though storage at 38-40 deg. markedly reduced breakdown, it tended to increase the percentage of the rotted Apples, though the net result was generally a great improvement. Further, there was a definite loss of color in French Crab held for long periods. This suggests that with fruit picked at a suitable stage of maturity an intermediate temperature, say, 35-36 degrees, would be preferable for storage for more than three months. No reasonable storage temperature will prevent serious breakdown in very susceptible fruit. As occurred last season, such fruit may break down even if held in the orchards. In this connection it is interesting to note that temperature taken last winter near Huonville showed monthly mean minima of 34-36 degrees, and maxima of 48-50 degrees during June to August. This would indicate that the true mean temperature for those months did not exceed 40 degrees.

The following recommendations for picking and storing susceptible varieties, if adopted, should reduce breakdown to a satisfactory minimum. They are based on experiments conducted with fruit from the Huon area, which were ini-

FOR A REAL SALES SERVICE

Under the Personal Supervision of the Directors

Consign Your Fruit to——

Minear, Munday & Miller

Limited.

Fruit Brokers and Commission Salesmen

COVENT GARDEN - - LONDON

Sole Selling Agents in London for
THE SOUTH AUSTRALIAN GOVERNMENT
FOR FRESH FRUITS.

An All the Year Round Clientele for
APPLES, PEARS, and ORANGES.

Sales by PRIVATE TREATY or AUCTION as Desired.

N.S.W. Representatives.—MACDERMOTT & SHEEDY, Municipal Fruit Markets, Sydney.
West Aust. Representative.—A. HICKS, 18 William Street, Perth.
Victorian Representatives.—Messrs. GOLLIN & CO. PTY. LTD., 561 Bourke Street, Melbourne.
Bankers:—NATIONAL PROVINCIAL BANK LTD., LONG ACRE, LONDON.
Cable Address:—"ORLEMFRUIT," LONDON.

Fruit Trees & Fruit Tree Stocks

Splendid Stock of Healthy Plants Available.

Apples, Peaches, Pears, Plums, Apricots, Citrus, etc., packed and despatched to all parts of the World.

Overseas Orders receive careful and prompt attention.

Catalogue printed. Code A.B.C., 5th ed.

C. A. Nobelius & Sons Pty. Ltd.

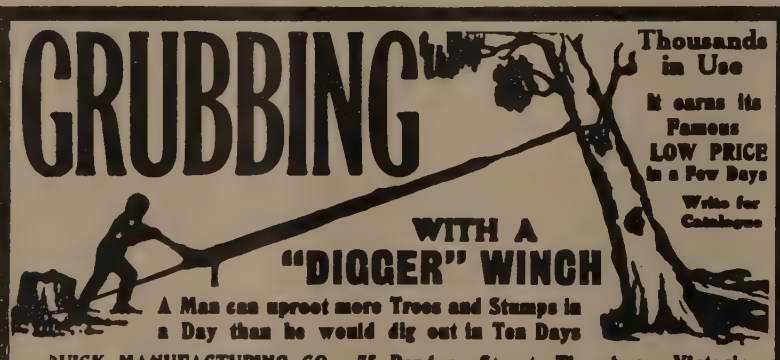
Gembrook Nurseries, EMERALD, VICTORIA
'Phone, Ringwood 171.

"FRUIT WORLD ANNUAL."

Comprehensive review of Australian and New Zealand fruit industry

"The Fruit World," Box 1944 G.P.O., Melbourne.

GRUBBING



Thousands in Use

It earns its Famous LOW PRICE in a Few Days

Write for Catalogue

WITH A "DIGGER" WINCH

A Man can uproot more Trees and Stumps in a Day than he would dig out in Ten Days

QUICK MANUFACTURING CO., 75 Penders Street, Thornbury, Victoria

READ THE

"Australasian Poultry World"

SOMETHING OF INTEREST FOR EVERY POULTRY BREEDER

All Newsagents **6d.** *per Copy*

tiated in co-operation with the Department of Agriculture in 1929, and are still in progress.

Recommendations for the Prevention of Breakdown in Apples.

1. Do not cool store fruit from trees carrying fruit definitely larger on the average than the average size of the fruit on trees with good crops. Oversized fruit is an indication that the tree is carrying less than a normal crop for the season.
2. Pick the fruit as far as possible on the basis of the ground color, that is, the color of the parts which are not red or flushed. The following guides to picking are based upon the results of experiments last season:
   Jonathan and Scarlet. When ground color is light green.
   Sturmer. When ground color is changing from full green to light green.
   French Crab. When almost full green, that is, when the original green shows the first evidence of becoming lighter.
3. Store susceptible varieties at a temperature of 35-36 degrees or as near as possible. Several cool stores have expressed their willingness to provide this temperature if growers will provide sufficient fruit to fill a storage chamber. It would be advisable to have some of the fruit stored at the usual 32-34 degrees for comparison of the results.
4. Examine the stored fruit at intervals by taking samples of the larger sizes and placing them in a warm room for not less than two weeks. If breakdown is found in the stored fruit or develops in the samples, the fruit should be marketed as soon as possible.
5. Do not judge the comparative desirability of 35-36 degrees as against 32-34 degrees from the fruit as it appears in cool store or before it warms up, as breakdown develops mainly after storage. When packing out for shipment to the mainland take samples as above, and also compare the returns received. The fruit from the two temperatures should be marketed in such a way that the returns can be kept separate.

Fruit Desired for Experimental Purposes.

The writer would be glad to receive fruit from Tasmanian growers for experimental storage at 38-40 and 32-34 degrees. At the completion of the tests a report would be given, which should be of value for comparison with reports from the markets. Fruit picked and packed at the same time as overseas consignments would be especially welcomed. A minimum of four cases of a variety from the one run of fruit, with not less than two of any grade size would be necessary. Notification of the despatch of the fruit should be made to the writer at the University, Hobart, giving particulars as to date of picking, etc. If taken from overseas consignments, particulars as to the boat and port to which consigned should be included. The fruit should be consigned to the same address, unless it is from the Huon area, in which case it should be delivered to the Huonville Cool Store.

Variety.	Orchard.	Picked.	Storage Deg. F. Temperature		% Breakdown.	% Breakdown and rots.	Weeks in Store.
C.O.P.	A	2/3	38-40		16	17	13
			31-34		37	38	
	A	16/3	38-40		39	40	11
			31-34		54	56	
	B	3/3	38-40		15	17	13
			31-34		52	54	
	B	16/3	38-40		14	18	11
			31-34		59	59	
Jonathan	A	20/4	38-40	2¼ in.	4	6	11
				2½ in.	10	12	
			31-34	2¼ in.	10	12	
				2½ in.	20	23	
Scarlet	A	11/4	38-40	2¾ in.	0	2	11
			31-34		4	5	
	A	5/5	38-40	2¾ in.	46	48	17
			31-34		77	78	
	B	3/4	38-40	2¼ in.	0	5	21
			31-34		15	15	
	B	26/4	38-40	2¼ in.	8	15	18
			31-34		17	21	
Sturmer	A	29/4	38-40	2¾-3 in.	35	43	22
			31-34		74	77	
	A	10/5	38-40	2¾-3 in.	19	55	23
			31-34		47	67	
	B	26/4	38-40	2¼-3¾ in.	2	19	22
			31-34		12	20	
	B	13/5	38-40	2¼-2½ in.	13	31	22
			31-34		67	72	
	C	19/5	38-40	2¾-3¼ in.	11	39	21
			31-34		65	83	
French Crab	B	27/3	38-40	2¼-2¾ in.	0	6	26
			31-34		42	47	
	D	11/4	38-40	2½ in.	1	8	24
			31-34		65	68	
	D	16/5	38-40	2½ in.	13	22	22
			31-34		94	97	

OVER-PRODUCTION OF DORADILLO GRAPES.

£40,000 to Assist in Change-over to Other Production.

The Minister for Customs (Mr. White) recently announced that the Commonwealth and the South Australian Governments would each contribute an amount not exceeding £20,000 to assist growers of Doradillo Grapes to change to other forms of production. If action were not taken it would mean the abandonment of Grape growing, particularly in the Berri district. The Governments concerned recognised that they had a certain obligation to the growers as each block was planted with a certain acreage of Doradillo Grapes. The action taken was a further step in the stabilisation of the wine industry.

REMOVING RESIDUE ON FRUIT.

Following the announcement by the Victorian Department of Agriculture at the beginning of the season, that regulations against the export of fruit showing surface signs of arsenate of lead spray residue would be stringently enforced, orchardists were faced with the task of hand wiping each fruit or washing it in an acid bath.

To meet this position the D. Harvey Orchard Implement Works, of Box Hill, Vic., have designed and constructed an automatic fruit washing machine which, by means of a series of revolving rollers and a wooden slatted conveyor, first removes all twigs and leaves, carries the fruit through a swirling bath of a 1 per cent. solution of hydrochloric acid, then through a rinse bath of clear water, and finally washes it free of every trace of acid by high-pressure water spray jets and delivers it on to a grading table ready for packing.

Mr. V. Lawford, a leading orchardist at Doncaster, Vic., has installed one of these machines, and it is working splendidly, putting through from 400 to 500 cases of Pears a day, as against the 30 or 40 cases that could be dealt with by hand wiping.

After Harvest Clean-up.

Orchard Sanitation and fire-blight Precautions in N.Z.

ADVANTAGE should be taken of each fine day in cleaning up the orchard by collecting all unused or broken boxes and parts thereof, rubbish, including rotten and decaying fruit and mummified remains of stone fruits, props, etc. It is important that anything in the nature of mummified or rotten fruit or rubbish be destroyed by burning or burying deeply.

Trees affected with silver-leaf should be destroyed forthwith, otherwise they are easily overlooked once the foliage has disappeared. In orchards where fire-blight was prevalent during the past summer, a minute inspection should be made for cankers, and where these are located they should be immediately removed by cutting the branch well below the canker and destroyed by burning. It must be remembered that one canker, if not detected and destroyed, is capable of reinfecting a whole locality with fire-blight during the next blossoming season.

The mending of broken orchard boxes, stacking away props, an overhaul of the grader, and a general clean-up of the packing and grading sheds is work that can be done on wet days.—"N.Z. Jour. Agric."

"Black Leaf 40"
Death to Aphis
(Plant Lice)
and Other Insects
Aphis and other insects are common enemies of the orchardist and gardener. Protect your trees, vines and plants with "Black Leaf 40."
"Black Leaf 40" has the endorsement of Agricultural Colleges, Experiment stations and orchardists. It is the World's leading aphis specific. It also kills the young larvae of many chewing insects when sprayed upon them so as to wet their bodies.
In the Orchard and Garden
"Black Leaf 40" is recommended for killing wooly aphis, apple aphis, peach aphis, aphis on roses, other flowers and vegetables, mussel scale (young), Harlequin fruit bug, holy or cross bug, oleander scale (young), San Jose scale (young), red scale (young), red mites (Summer), rutherglen bug, pear and cherry slug, thrip, fine scale (young), pea mite.
In the Poultry Yard
Paint the roosts lightly with "Black Leaf 40" just before the birds go to roost. Body-lice will be destroyed while the flock roosts. To help prevent mites from attacking fowls, tie or tack a piece of heavy cloth around ends of roosts and roost supports and saturate with "Black Leaf 40;" spray inside of house with "Black Leaf 40," three tablespoonsful to a gallon of water to which soap has been added.
Kills By Contact and By Fumes
"Black Leaf 40" has a dual action. It kills plant insects both by fumes and by contact. This double-killing action makes "Black Leaf 40" unusually effective in insect control.
Paint Roosts . . . Kill Poultry Lice
Poultrymen find that if they paint the roosts lightly with "Black Leaf 40" the lice on the birds are killed. The heat from the birds' bodies releases fumes which destroy lice, as the flock roosts on perches.
Genuine "Black Leaf 40"
"Black Leaf 40" is registered by us in Australia and New Zealand as a Trade-Mark and Brand. Users are familiar with the red labelled packages and the black leaf design prominently displayed thereon. Beware of imitations. Insist upon genuine "Black Leaf 40," made only by Tobacco By-Products & Chemical Corporation.
Distributed in Australia by Neptune Oil Company, Melbourne, and by Producers' Cooperative Distributing Society, Sidney
MANUFACTURED BY
Tobacco By-Products & Chemical Corp.
(Incorporated)
LOUISVILLE, KENTUCKY, U.S.A.
"Black Leaf 40"
NICOTINE SULPHATE
POISON
Active Ingredient, Nicotine 40%
Inert Ingredients, 60%
TOBACCO BY-PRODUCTS & CHEMICAL CORP., INCORPORATED
Louisville, Ky.
MAKES 6 GALLONS OF SPRAY

Dried Fruits—News and Notes

AUSTRALIAN DRIED FRUITS IN U.K.

Prices Low, But Improved Tendency Noted.

The Chairman of the Commonwealth Dried Fruits Control Board (Mr. W. C. F. Thomas), advises that during the week ending March 8, 2,571 tons of Australian dried fruits were sold in the British market. As the Currants and Lexias shipped during the season 1933 have all been sold, with the exception of some negligible parcels, practically the whole of the week's sales comprised Sultanas—2,554 tons of which averaged £28/8/4.

The present low level of prices is due to the economic conditions in Great Britain, and to the presence of considerable quantities of Mediterranean and American fruit, which are depressing the market in Great Britain as the result of the inability of Continental countries to take up normal quantities of Turkish and other Mediterranean fruit.

An improved tendency is noted in the market due to the adverse reports which are reaching London as to the progress of the 1934 harvest, which has recently been adversely affected by rain and humid conditions in the principal centres.

The total sales of Australian Sultanas, season 1933, has now reached 26,114 tons out of 39,764 tons of Sultanas shipped for the season. The average price realised is £35/4/6 per ton.

The balance unsold is 13,650 tons of Sultanas and as some shipments of the new season's crop may be made at an early date the clearance of the record shipments of Sultanas to Great Britain is of moment.

DRIED FRUITS BOARD.

Finances Satisfactory.

The finances of the Commonwealth Dried Fruits Control Board for 1922-23 include the following:—Receipts (mostly levies), £28,381; expenditure, £35,904, the main items being—advertising in U.K., £20,000, Canadian market development, £6,942, administration, £3,105. The balance on hand at June 30 was £32,199. In presenting these figures the Federal Auditor General (Mr. Cerutty), reported that the accounts of the Board were kept and audited satisfactorily.

The South Australian Dried Fruits Board has issued a warning to growers against drying Doradillo Grapes, because of their inferior quality for drying.

DRIED FRUITS RESEARCH.

The Mildura Packers' Association recently offered to contribute £1,000 annually for three years, and the Council for Scientific and Industrial Research was requested to engage a chemist to investigate the problems associated with the cultural, processing, packing and selling aspects of the dried fruits industry.

Mr. Orton an industrial chemist, with Messrs. Plastowe & Co., of Fremantle (W.A.), has been selected. Various analyses will be undertaken at the Waite Institute, Adelaide. Most of Mr. Orton's research will be conducted at Merbein, but he will later go to Melbourne and also London.

S.A. Dried Fruits Levy.

The S.A. Dried Fruits Board have resolved to make a determination fixing the levy at 1/32d. per lb., or 5/10 per ton on all dried fruit produced in 1934. Renewal of registration was granted in respect to the applications of three packing sheds.

DRIED TREE FRUITS.

Poll of Growers on May 9.

It has been decided by the Minister for Commerce (Mr. Stewart) that the poll of growers of dried tree fruits to be held in accordance with the Dried Tree Fruits Act will close on May 9. If the growers agree to the proposal that marketing in the industry should be controlled, it will apply to this year's produce, otherwise the Act will lapse. Growers are being supplied with ballot papers.

CONTROL OF DRIED TREE FRUITS.

The State Dried Fruits Control Board has announced that sales of dried fruit must be made through registered packing houses or sheds, that had obtained exemption. This decision means that no dried tree fruits can be sold or purchased unless first processed and packed in a registered shed. The board will grant another silver cup for Lexias to the Mildura Horticultural Society to replace the one which was won outright last year.

Licences for the processing and packing of Prunes have been issued to the following: — Messrs. W. A. Blake Pty. Ltd., Steriliser Pty. Ltd., Wonderland Fruits Products Pty. Ltd., Lambert Products Pty. Ltd., and Melbourne Dried Fruits Pty. Ltd., all of Melbourne, and to the Bamawn Citrus Association, for the packing of Prunes grown in the Bamawn district.

Poll of Growers.

The poll of growers of dried tree fruits in the Commonwealth will be taken in May. The continuance of the Act depends upon the affirmative vote of the growers at the poll.

WAIKERIE (S. AUST.).

The Waikerie dried fruit crop appears to be at least as successful as in recent years, and Sultanas, which were thought to be damaged considerably, are drying into quite good samples at the Waikerie Co-op. Packing Shed.

The dehydration of Pears has proved a complete success in the Waikerie shed, where a new, well-equipped store-room, separate from the main building, was erected some months ago.

MILDURA.

Aurora Packing Co.

To Store Fruit Here Instead of Piling up Stocks in London.

The Aurora Packing Company has decided to store the fruit and to process and pack same as and when required for the London Market instead of having surplus stocks in London. Mr. Cleary stated that the London buyers were tired of seeing the same samples day after day. He referred to the Smyrna policy, and said that although this method was impossible in Australia, the scheme outlined presented the same possibilities. If the growers delivered the fruit thoroughly dried after topping off or bleaching and it was then stored in an unstemmed state and in its grade section it would soon settle down, and any deteriorated fruit could be deleted from the pack without spoiling the parcel. Mr. J. W. Bowen stated that in his opinion the time was approaching when the growers and packers should combine in sending a dependable pack to London. It must be remembered he said that this open market paid cash for value.

ILLEGAL SALE OF DRIED FRUIT.

Grower Fined £25.

At the Renmark Court in February, Archibald Samuel Thomas Braund, a fruitgrower, was fined £25 and £1/5/- court fees for contravention of the Dried Fruits Act, in having sold 28 lbs. of dried fruit to a storekeeper.

Six months were allowed to pay the fine; in default, three months gaol.

* * *

It was stated that there was considerable illicit traffic in dried fruits, and the penalty was intended to be heavy.

* * *

Leeton Grower Fined £10.

Thomas F. Thomas, fruitgrower, of Leeton, was fined £10, with 8/- costs, in

Orchardists-Gardeners

Are You Interested in Fertilisers that

Increase Yield

.. and ..

Improve Quality ?

If so, write to us for a free copy of

The Application of Fertilisers

— TO —

The Orchard and Garden

By R. A. BOYLE, M.Sc.

Learn what is meant by

Balance in Fertilisers

FOR EXAMPLE:

The **2:2:1** — For Apples, Pears and Citrus in Rainfall Districts

The **4:4:1** — For Stone Fruit and Citrus in Irrigation Areas

The **5:2:1** — For Vines where Potash desirable. The 3 : 1 along the Murray

ADDRESS:—ADVISORY OFFICER,

NITROGEN FERTILISERS PTY. LTD.

360 Collins Street, Melbourne

H1/34.

default 21 days hard labor, for having sold a quantity of Currants to Barah Singh, a fruit hawker.

WOOD-WOOL PACKING.

The success of wood-wool packing for Grapes has been demonstrated by the landing in Mildura from South Africa of a case of Grapes (10 lbs. of Purple Cornichons), which despite their 34-day trip by the steamer "Ceramic," possessed the bloom of freshly picked fruit. Each of the bunches was wrapped separately in tissue paper, with woodwool as an outer protection.

Mr. C. Ralph, district supervisor at Merbein, considers that woodwool packing simplifies the export of fresh Grapes on long journeys, eliminates vibration, and provides greater air-space than the cork packing used by Australian exporters, thus giving a longer export range.—"Sunraysia Daily."

SERVICE TO ORCHARDISTS.

The extensive warehouse, offices and machinery stores of Messrs. Cameron, Sutherland and Seward Pty. Ltd., are situated at Riverside-avenue, South Melbourne, Vic. The various departments are fitted with efficient machinery and mechanical equipment to meet requirements in the primary production field.

Anyone requiring advice on pumping problems or as to the suitability of any particular plant may obtain same free of charge from their experienced staff.

Of special interest to the primary producer is the pumps and rural department.

The company has recently announced the new "Riverside" centrifugal pump, which is entirely of their own manufacture, and produced after careful design and extensive test under laboratory and actual field conditions. Extensive tests conducted at the Melbourne University Hydraulic Testing Laboratories, bear out the efficiency of design and performance.

Among the many lines listed by Messrs. Cameron, Sutherland and Seward, are included power and hand operated orchard equipment. Their new sectional catalogue for 1934 is now available, and a copy will be posted to any reader on application.

APPLES FOR POOR CHILDREN.

An appeal is being made for Apples for poor children by Mrs. Alice Creswick, President of the Lady Northcote Free Kindergarten. Fruit should be sent to Montague Railway Station.

She Was a Scotch Lassie.

Uncle Joe. What sort of doll would you like for Christmas Jean?

Jean: I think I'll have twins, Uncle.

Western Australia

APPLE SALES BOARD

Valuable Organization in Western Australia.
Stabilised Marketing on a Voluntary Basis.

THE APPLE SALES BOARD is a registered and responsible body in Western Australia, and is performing services of great value to growers in Western Australia. Incidentally, this Board has assisted in improving the market generally for other fruits.

It might have been thought that with the market for Apples to themselves for local sales (seeing that fruit from the other States is prohibited), the growers and market men between them could have quickly organised, but this matter was by no means as simple as it looked. As a result the Apple Sales Board was brought into being some four or five years ago, and even yet there are difficulties which have to be overcome.

The Organised Programme.

In brief outline the scheme is that of obtaining from growers a statement as to the quantity of fruit they have both for export and local markets. By being in possession of these details the Apple Sales Board can advise growers of the quantities and varieties to export, and as to the regulated system of supplies to the local market. The system is entirely a voluntary one and has put thousands of pounds into the growers' pockets. Furthermore, there has been a saving in freight of over £600 per annum on a bulk loading scheme.

In a recent statement to growers the Board points out:

There are no obligations to undertake.

There is no pooling.

There is no interference with choice of agents.

All that is asked is growers be willing to allow their fruit to be withdrawn when recommended.

How the Plan Works.

First of all, experiences of previous seasons are considered in relation to crop prospects and growers are advised in regard to storage, both as to varieties and quantities.

About June, each cool store is asked to supply, in confidence, a statement of the total number of cases of each variety stored, and a general survey of the grades, and from then on each store supplies regularly a list of the number of cases of each variety received and of the number withdrawn.

These figures are aggregated so that the Board knows week by week the exact character of the problem and how it is changing.

The withdrawal of Apples is usually effected in accordance with the Board's advice, growers generally realising that this organisation is best equipped to give the necessary advice.

Considerable benefits have followed this organised scheme, and the tendency to store excessively has been checked. The withdrawal recommendations have saved growers loss through deterioration and superfluous storing charges.

The fact that the Board has been able to prevent fruit arriving "on the blind" to clash with fruit from other districts has meant very substantial gains.

The greatest benefit has been the stabilisation of values, and this has won the appreciation of the growers. Through this organised effort the demand has been maintained when prices fluctuate for fruit. Public demand is not greatly increased by a sudden fall in prices, but a sudden rise in prices checks the consumption very quickly, moreover, when this happens the public are not immediately responsive to the fall, which, under all conditions follows, the result is that the sale of a certain quantity of fruit is not merely postponed but is lost for ever. This loss of consumption has been overcome.

The production of Apples in Western Australia in the 1921-1926 period averaged 566,096 cases per annum, in the years 1927-1932, the average annual production increased to 772,645 cases — an average increase of 206,549 cases, or over 36 per cent. Owing to the depression the consumption declined, the average for the past three years being 278,231 cases per annum.

Where a few years ago the State absorbed about half the production it now takes scarcely more than a quarter.

Substantial acreages have yet to come into bearing, which will further reduce the proportion of the local market consumption.

The 1933 Season.

The fourth annual report covering experiences of the 1933 season is just to hand. It is pointed out that because of growers selling to speculators **without giving advice to the Board** the organised scheme could easily have been endangered.

Growers are urged to observe the latest cultural practices, including thinning, and to concentrate on the production of high quality fruits, well-graded and packed.

. . .

The Apple Sales Board is a registered body constituted of:—Mr. A. C. R. Loaring (Chairman of Directors, Producers' Markets Co-operative Limited), Chairman; Mr. J. Thomson, general manager The Westralian Farmers Ltd.; Mr. A. P. Sharpe, chairman of directors, Bridgetown branch the Westralian Farmers Ltd.; Mr. J. McNeil Martin, chairman of directors, Mt. Barker Fruitgrowers' Cool Storage Co-op. Society Ltd.; Mr. C. W. Harper, chairman of directors, the Westralian Farmers Ltd. (as Chairman of the Executive).

The Executive of the Board includes:—Mr. C. W. Harper, Mr. C. E. Bolt, manager Albany branch the Westralian Farmers Ltd.; Mr. A. T. Booth, manager, Mt. Barker Fruitgrowers' Cool Storage Co-op. Society Ltd.; Mr. E. Fisher, manager Bridgetown branch The Westralian Farmers Ltd.; Mr. F. Simper, manager fruit export department The Westralian Farmers Ltd. (representing Mr. J. Thomson); Mr. H. W. Soothill, general manager, Producers' Markets Co-op. Ltd.

The Marketing Committee is constituted as follows:—(Metropolitan members): Mr. T. Price, managing director, Illawarra Orchard Ltd., Karragullen (Chairman); Mr. W. Berryman, representing Berryman & Langley Ltd., Perth; Mr. R. M. Carter, manager, fruit department, Paterson & Co. Ltd., Perth; Mr. J. Glendenning, representing W.A. Fruit and Produce Market, Perth; Mr. F. W. Lantzke, representing F. W. Lantzke, Perth; Mr. M. Scanlon, representing Scanlon & Simper Ltd., Fremantle; Mr. F. Simper; Mr. H. W. Soothill. (Country members): Mr. C. E. Bolt, Mr. A. T. Booth, Mr. E. Fisher.

The expenses of the Apple Sales Board are under £50 per annum as all the services are rendered voluntarily by the parties concerned. The Board, in its reports emphasises its belief in the effectiveness of voluntary effort, having absolutely refused to seek or countenance artificial interference by way of legislation.

The Hon. Secretary is Mr. H. W. Soothill.

It was reported at the Growers' Marketing Section of the P.P.A., in Perth recently, that the sale of fruit on beaches was illegal: it was decided to take up the matter with the Minister for Agriculture to effect the needed change.

Owing to the prevalence of the fruit fly it was suggested that the press give publicity to this subject to assist in effecting improvements.

Green Timber for Cases.—At the February meeting of the Bridgetown Fruitgrowers' Association, Mr. Sparkes expressed his disappointment in the fact that green timber was being sent from the mills, despite the promises made by Mr. Sinclair at the Bridgetown meeting, although quite a number had been unsuccessful in obtaining their cases this season.

FRUIT FLY IN W.A.

At a meeting of the Executive Council of the West Australian Fruitgrowers' Association at Kojonup recently, Mr. Parke urged that the attention of the Agricultural Department be drawn to the great increase in the spread of fruit fly in the Boyanup, Donnybrook and Harvey districts, and that stringent measures should be taken to prevent this pest spreading, and to reduce it as far as possible.

REGISTRATIONS.

Wills, D. G. (Melb.) Pty. Ltd., fruit growers, general merchants and warehousemen. Regd. December 30. Regd. office, 249 Franklin-street, Melbourne. Capital, £5,000 in £1 shares. Names subscribed to memorandum: David Graham Wills 1 share, Clement William McRostie 1 share.

To Control Brown Spot of Passion Fruit.

Bordeaux Mixture Recommended.

After conducting experiments, the N.S.W. Department of Agriculture recommends applications of Bordeaux mixture (6-4-50) at regular intervals after first pruning the affected vines.

The vines on which the trials were carried out were planted in eight rows 11 feet apart, each row averaging 25 vines 15 feet 6 inches apart, the vines being trellised on two parallel wires on the top of posts standing 5 feet out of the ground.

After maturing a crop in the midwinter, the vine growth was very dense, and the disease was prevalent. In July the vines were pruned to eliminate as much diseased material as possible, as well as to reduce the quantity of old growth. Commencing in August, four rows of vines were sprayed regularly up till mid-January with Bordeaux and four were left unsprayed for comparison.

Brown spot disease made its appearance on the untreated vines during October, and by the middle of December, the vines had lost most of their foliage and a large quantity of fruit produced on these unsprayed vines was unmarketable. By early January practically all the foliage had become affected, and 50 per cent. of the fruit was destroyed.

The Bordeaux sprayed vines remained practically disease free, and the loss of fruit was negligible.

FRUIT FACTS FROM U.S.A.

Under the heading, "Fruit Facts," the "National Nurseryman," U.S.A., publishes the following:—

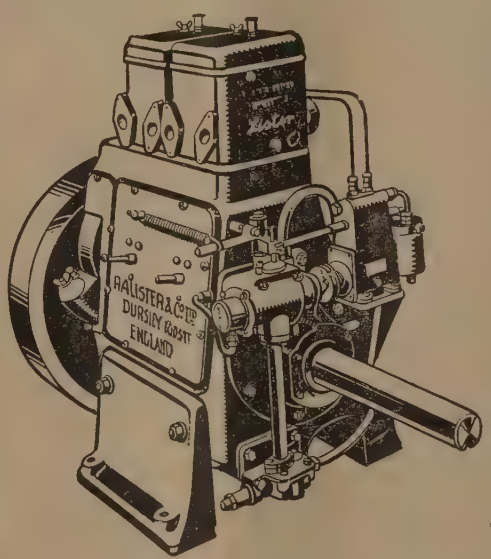
Delicious, Winesap, Jonathan, Baldwin, Stayman's Winesap, Ben Davis, Rome Beauty, York Imperial, McIntosh and Grimes Golden, in the order named are the favorite varieties, and these make up 60 per cent. of the total number of trees in commercial orchards.

Northwest production of Apples increased in 20 years from 19,000,000 bushels of Apples to 56,000,000 annually.

The yearly export of Apples is about 16 per cent. of the crop, this year, some 13,800,000 bushels.

Pear production in the United States has been upward for the past 30 years, and sufficient trees in bearing are in evidence to maintain this for another ten years. Prices are now so low as to encourage neglect of orchards.

Had California Pear growers destroyed 1,500 carloads of Pears in 1932, they would have received 1,000,000 dollars more for their crop, says a University of California investigator.



From 3 to 38 b.h.p.

Write for full details of the many models.

Double your returns—

and halve your case costs *with* Local Cool Storage

You can take your pick of market prices when you hold your fruit in your own cool store, and you will cut your case costs in half, as well.

Let us tell you more about this money making plan, and how you can provide the cheapest possible power plant. The British Lister Diesel (crude oil) Engine starts from dead cold as easily as a petrol engine, and will give you five full horse power for less than 2d. an hour.

Lister BRITISH BUILT

Cold Starting

DIESEL ENGINES

Distributors for N.S.W.—

DANGAR, GEDYE & CO. LTD.

10-14 YOUNG STREET, SYDNEY.

Distributors for Victoria—

MITCHELL & CO. PTY. LTD.

WEST FOOTSCRAY, Vic.

Re-furnishing Fruit Trees

WATERPROOFING AND AFFIXING MATERIALS

By P. H. Thomas, Chief Horticulturist,
Tasmanian Dept. of Agric.

FOLLOWING the experiments conducted in re-furnishing fruit trees by the different grafting processes a series of tests has recently been completed with the principal waterproofing and affixing materials.

Re-furnishing, especially on fully developed trees, involves a fair amount of time and labor. Any efficient means by which this may be reduced or facilitated is of distinct economic importance to the industry, as at present there are very few growers not converting varieties that have proved unprofitable.

The experiments were confined to the different materials utilised in waterproofing and affixing the side, plug and tongue grafts when applied to convert Apple trees to other varieties. A brief review of the observations and results is detailed.

Waxed Cloth.—This material was found to be quite effective, especially for binding tongue (or whip) grafts applied to laterals. For side and plug grafts the method adopted was to utilise pieces of waxed cloth approximately 1¼ in. square. An "X" shaped incision was made at about the centre of these to enable the graft to protrude, and the material brought firmly down over the incision. If this is carefully performed and the "X" cut made somewhat smaller than the graft, it can be affixed so that no water will drain down the graft and penetrate into the wound.

The chief disabilities of this method are that it is rather slow in operation, the waxed squares of cloth need attention to ensure they are in position, and they subsequently have to be removed. Woolly aphis (Schizoneura lanigera) is also inclined to breed underneath the cloth and infest the wounds caused in the grafting process.

Grafting Wax.—This is generally prepared by melting resin, tallow and beeswax or sometimes linseed oil, together in quantities that will produce a grafting wax of the desired consistency. If a tough wax is required that must necessarily be applied hot with a brush, the proportion of beeswax is increased, whereas if the wax is to be softer and more plastic and applied by means of the fingers, a larger amount of tallow is added.

Grafting wax has been used for a long period for propagation and reworking purposes and is generally applied after binding with a suitable material such as bass or raffia. This material has proved eminently suitable for waterproofing the tongue type of graft, but with side and plug grafts a good deal of cracking has been experienced, the mixtures not being sufficiently elastic to distend whilst occlusion was taking place, and prevent water from entering the wounds.

The necessity of keeping the grafting wax hot when making application is also rather troublesome and even the plastic waxes cannot be effectively applied without artificial heat, when low temperatures are experienced. Side or plug grafts waterproofed with this material need subsequent attention to ensure that all parts of the incision remain covered until union is effected.

Bitumen.—This has been extensively used with a fair amount of success on the different types of grafts, and owing to its nature, must be heated before application. Bitumen being more elastic than grafting wax does not need much subsequent attention after the necessary parts have been covered. Owing to its holding capacity bitumen is successfully used on tongue grafts without the employment of tying material.

An undesirable feature, however, is its tendency to produce an abnormal graft callousing and although union is generally obtained, this is often accompanied by large corky-like excrescences, that are prone to harbor disease.

Bitumen Emulsions. — This has recently been tested, and owing to its liquid and subsequent hardening qualities when exposed to the air, it was thought would prove an ideal preparation. A fair amount of success was experienced when this material was used as a waterproofing material for the side and plug type of grafts, but difficulty was experienced in keeping the mixture stable, there being a tendency apparently for the components to vary in proportion and produce a consistency that was sometimes so liquid that it would penetrate into the wounds with disastrous results to the scion. Callousing was also in some cases of an abnormal character with corky-like excresences.

Crude Petroleum Jelly. — From the viewpoint of efficiency and easy application, a thick crude petroleum jelly has proved superior to the other materials used. It is sufficiently plastic at even low atmospheric temperatures to be applied without heating, and can be readily smeared over the incisions with a thin spatulate shaped piece of wood or with the fingers. Under Tasmanian temperatures the petroleum jelly supplied has proved eminently satisfactory, and is sufficiently elastic to give without fracture to any distension occurring during occlusion and subsequent thickening.

Grafts of the plug, side and tongue type have been treated with this preparation, and very satisfactory unions obtained. Tongue grafts carefully prepared and firmly spliced into position have taken well without any tying material, the union being simply coated with crude petroleum jelly. The material is aphis resistant and affords good protection to the graft during the growing period.

LIMING OF ORCHARD LAND.

Autumn Application Recommended.

LIME has very little manurial value, but is useful in improving the physical condition of the land; in particular, it loosens heavy clay soils, states the N.S.W. Department of Agriculture. Lime liberates potash and renders other plant foods in the soil more available to the plants, and is therefore an "indirect" fertiliser. It helps in the decomposition of organic matter, aids nitrification, and if applied in sufficient quantities will counteract harmful acidity. Too heavy an application will release plant foods more quickly than is required, and they are likely to be lost to the plants.

Ground limestone, or agricultural lime, which contains lime in the form of carbonate of lime, is the safest form to use, and an application at the rate of 1 ton per acre is advisable. Larger applications can be made if the soil is very acid. It is easily applied by broadcasting evenly over the land, and is most readily assimilated by the soil in this form when ground up very fine.

The autumn is a suitable time for applying lime. It should not be applied to the soil at the same time as superphosphate or fertilisers containing ammonia; an interval of about six weeks should elapse between the applications of lime and fertilisers.

Burnt lime, also known as quicklime or builders' lime, and air-slacked lime (calcium hydrate) are too caustic in their action, especially the former.

CATALOGUE RECEIVED.

We acknowledge having received from Mr. C. J. Goodman, Bairnsdale, Vic., the special trade price list of fruit trees, fruit bushes, fruit tree stocks, nuts. Included are Apples, Apricots, Cherries, figs, Nectarines, Peaches, Pears, Plums, Prunes, Quinces, Persimmons, Passionfruit, Grape Vines, berry fruits, Lemons, Oranges, etc. The nurseries are examined regularly each season previous to sending out trees, and a clean certificate can be had with each consignment if required.

ARE YOU GRUBBING?

Previous experience had convinced me that to be really efficient a grubbing machine should have ample power and ropes that will meet the heavy demands required of them. I found that shovel and axe work is very costly either by itself or in conjunction with a machine. The machine that offered these features, with a host of others, was **THE "MONKEY" GRUBBER.**

It gave me the power of 260 pairs of hands in a simple and compact form; the lever is short, so that I am able to stand firm-footed and get the full stroke. There are two speeds in the machine, as well as an automatic release that allows me to let off a strain, or as the machine will work in any position, it comes in for all jobs that would require a chain block. It is taken to the job on a pair of wheels like a barn truck, and is rigged for work in a few minutes. The ropes are in lengths that I find easy to handle, and each one is fitted with hook and loop couplings, so simple and absolutely IT for effectiveness. The makers have included a sturdy snatch block with a novel method of securing to the ropes, and also a fine type of firm gripping rope shortener. The latter makes it very easy to accommodate the lengths of rope to the tree or stump being pulled, and is quickly released from the rope. The combination of so many time and labor saving features makes the "Monkey" Grubber a superior grubbing outfit.

REMEMBER FOR YOUR GRUBBING THERE'S ONLY

H. H. HINDS,
Kent Street, Sydney.

A.G. WEBSTER & SONS
Hobart and Launceston.

A. ROBINSON,
821 Ann St., Brisbane.

Leading Stores and Merchants, South and West Australia.

TREWHELLA BROS. Pty. Ltd. Trentham, Vic.

Fruchthandel Gesellschaft

Scipio & Fischer

Fruchthof-Bremen

Fruchthof BREMEN Germany

Cable Address: "Orange," Bremen

Established 1902

AUSTRALIAN REPRESENTATIVES:

Victoria: J. B. Mills & Co., Aberdeen House, 528 Collins Street, Melbourne.

South Aust.: Messrs. Paterson & Co. Ltd., Adelaide.

West Aust.: Messrs. Paterson & Co. Ltd., Perth.

Tasmania: Messrs. H. Jones & Co. Pty. Ltd., Hobart.

New South Wales News and Notes

Fruit Crops in N.S.W.

FRUIT CROP conditions are reported on as follows by the Department of Agriculture in the latest report issued:—

Weather conditions proved beneficial in some districts, in others, particularly Young, the hail and wind caused extensive damage. Around Armidale too much rain retarded the coloring of Apples. A heavy shedding of well-developed fruit has taken place in Apple orchards in the Bathurst district. Export packing of Jonathans and Granny Smith Apples and Packham's Triumph and Beurre Bosc Pears is proceeding at Armidale. It is expected that very few Apples will be exported from the Goulburn district, but Jonathan, King David, Fameuse and London Pippin are being marketed, and good quality fruit is realising satisfactory prices.

In Young district the Prune crop is medium to light; rains caused some damage to Robe de Sargeants. Crop also variable in Murrumbidgee Irrigation Area. D'Agens heavily cropped in some orchards, and generally will give better yields than Robes.

Citrus. — Some flooding occurred on coastal areas during February, noticeably in the Colo and Richmond centres, and along the Hawkesbury River, several groves being submerged for several days. Hail was also stated to be responsible for damage in the Wollombi and Branxton districts.

It is expected that maturity will be earlier than usual, in a number of areas, owing to rapid development, due to beneficial rains.

Considerable shedding of Lemons is taking place in the Hills and Parramatta districts.

Bananas.—Mostly fine weather was experienced in early February, but fairly heavy rains, and, in some instances, floods, were received, late in the month. Hail was responsible for losses in some plantations in the Lismore district.

Conditions were generally favorable, and good growth resulted.

Marketing has been heavy, but a slackening in production is anticipated over the end of March. Owing to low prices prevailing, much fruit has been allowed to rot in the plantations.

Pineapples.—Considerable interest is being taken in the establishment of new areas under this crop in the Lismore district. Good crops of both smooth leaf and other varieties are being harvested in the centre mentioned. The development of young fruit indicates a very satisfactory crop.

Passion Fruit.—On the North Coast the crops are practically finished. In the Hills district (County Cumberland), the vines are carrying good crops of fruit, but to date few flowers appeared for the winter setting.

Viticulture. — The Grape crops were adversely affected by too much rain during February. On the Hunter vintage, operations were hampered, and the density of Red Grapes was slightly reduced. In other districts, including the Murrumbidgee Irrigation Area, thin-skinned varieties commenced to split, which necessitated picking before the normal time in an endeavour to prevent losses.

Damage was occasioned to the table crop by splitting, and subsequent loss from rot and waste. The sugar content was also reduced.

WEED CONTROL IN BANANA PLANTATIONS.

Use of Poison Sprays.

To control weed growth with poison sprays is a common practice in Banana plantations on the far north coast of N.S.W., writes the N.S.W. Dept. of Agriculture. The question is often asked as to whether damage might not be done to the soil (and, as a consequence, to the Banana plants) by the use of these poison substances. Sodium arsenite and arsenic pentoxide are mainly used as weedicides in this State, and to date no harmful effects have been traced to their use. Carelessness in spraying may result in burning the foliage of the plants, but the spray should be put on the weeds not on the Banana stools.

Sodium chlorate, on the other hand, when used for the destruction of weeds in plantations, has been proved harmful. Further confirmation of this fact came to hand recently in the "Canadian Journal of Research," wherein is reported the results of investigations on the effect of chemical weedicides on subsequent cropping. It was found that sodium chlorate remained undecomposed in the soil for a considerable time, the poisonous effects being found nearly two years after application. Both sodium chlorate and sodium bichromate (another chemical weedicide used in the trials) exerted a depressing influence on the number of soil micro-organisms.

VINE CULTURE.

Green Manuring: Burying Cuttings.

IN an address to visiting growers from the Murrumbidgee Irrigation Area, Mr. R. M. Voullaire, Jnr., said that so as to ensure a comparatively rapid respiration during winter conditions, the winter stand of crop should be of a broadleafed nature, and a rapid winter grower. Tick beans were ideal for this purpose, but they must be sown before watering in March or April at the latest to be successful. About 2 cwts. of super. was used as a booster for this crop.

Preparation should be made for cutting-burying ditches during May. It was desirable to ditch out and seed down the cutting ditches in late May and early June. Because of their characteristic of slow winter, but rapid spring growth and late flowering tares were ideal for this purpose. About two cwts of super. were used for this crop.

HEAVYWEIGHT PEACHES IN N.S.W.

At the recent Uralla Show, Mr. H. Trickett displayed 12 Peaches of the J. H. Hale variety. Eight Peaches weighed 1¾ lb. each.; the other four weighed 1 lb. 2 oz. each.

Dunedoo. — At the Dunedoo show, the following were the successful exhibitors in the fruit section,—A. A. Piper, W. H. Nott, H. W. Honeysett, C. H. Honeysett, G. J. Nott, N. C. McMaster, A. R. Dawson, S. Johnson. The fruit, which was of high quality, included Apples (eating and cooking), Pears, Peaches, Quinces, Grapes, Figs, etc.

Hartley Vale. — Owing to severe hail storms there was considerable damage to fruit crops this season. It was impossible this season to put up a district exhibit at the Sydney Royal Show.

Mudgee.—Of excellent quality were the Pears (eating and cooking), Apples (Dels., Jons., G. Smith, Cleo., etc.), Peaches (slipstones and clingstones), Nectarines and Grapes (Muscat, Black Prince, Waltham Cross, etc.), exhibited at the Mudgee Show. Prizewinners included: F. Muller, J. Rheinberger, Harding Bros., H. Roth, Mrs. W. Hunt, E. Fiaschi, F. Fiaschi and G. Muller.

Parnworth. — Excellent dessert and cooking Apples, Pears, Peaches, Quinces, etc., were included in the fruit section

of the Parnworth Show. Award winners included G. Bryant, R. Streeting, W. Thompson, K. Freame, and H. Freame.

Leeton, N.S.W., 1/3/34.—Complaints are being made about the large proportion of damaged fruit which holds up the capacity of the Leeton Cannery, owing to the great amount of trimming to be done. The cannery is now working at full pressure with Golden Queens, Goodman's Choice, Phillip's Cling, and Pears.

FRUIT THIEVES FINED.

Fruit stealing in the Orange district (N.S.W.) received a setback with the arrest of three young men. Dudley William Tristram, 22, was fined £5 or ten days at the Orange Court, and Ivor Rutherford Graham Therry, 32, and Roy McMillan, 19, were fined £1 each or two days, for stealing two cases of Pears, valued at £1/5/-, and selling them in bulk to a fruiterer.

BROADCASTING PROGRAMMES FROM QUEENSLAND.

Broadcast talks on subjects of agricultural and horticultural interest are given on Tuesdays and Thursdays by officers of the Queensland Dept. of Agriculture at 7.15 p.m. from 4QG Brisbane.

Included are the following:—

April 3—"Control of Tobacco Diseases in the Field" (by L. F. Mandelson, B.Agr.Sc., Assistant Plant Pathologist).

April 10—"Cabbage Pests" (by Mr. J. A. Weddell, Asst. Entomologist).

April 24—"Some Breeds of Poultry" (by Mr. P. Rumball, Poultry Expert).

April 26—"Some Breeds of Poultry" (by J. J. McLachlan, Poultry Inspector).

May 1—"Squirter Disease of Bananas" (by Mr. J. H. Simmonds, M.Sc., Plant Pathologist).

* * *

Western Australia.

The West Australian Department of Agriculture will give broadcast talks as follows:—April 13: "Nitrogen-fixing bacteria for leguminous crops — Their role in the improvement of soil-fertility," by Mr. H. A. Pittman, Plant Pathologist.

May 4—"The Value of Honey as a Food," by Mr. H. Willoughby Lance, Apiculturist.

* * *

Victoria.

Under the auspices of the Victorian Department of Agriculture, wireless talks will be delivered from Station 3AR, Melbourne, between 6.15 and 6.30 p.m., as follows: — April 3, "Sweet and Savory Fruit Relishes," Miss Knight, fruit preserving expert; April 24, "Orchard Work in the Dormant Season," Mr. F. M. Read, M. Agr. Sc., Senior Horticultural Research Officer,

SOUTH AUSTRALIA.

Mid-Murray Notes.

Record Drying Season — Mould Development — Rejection of Green-tinged Sultanas — Sugar Content Determines Color. — Fertilisers and Green Manuring.

(By Our Special Correspondent.)

THE 1934 DRYING SEASON will go down in history as the most remarkable experienced for many years. Practically ever since drying operations commenced, the temperature has hardly been under 100 degrees day after day. Three weeks of this kind of weather has helped to dry thousands of tons of Currants and Sultanas in record time. One peculiar feature about the Currants this year has been the

development of mould

after having been spread on racks with tiers close together, or on wire trays placed too close together. In the first place, the Currants from heavy crops were lacking in sugar content, and the skin of this fruit being extremely tender, caused occasional breaking when roughly handled. Although mould in the fruit itself appeared to be of little consequence, mould spores must have been in an active condition, and developed rapidly. One large Currant grower purchased a rack drying dehydrator to counteract the spread of this infection.

This spread of mould is unprecedented, in view of the fact that daily temperatures were high, but an entire absence of wind probably gave rise to humid conditions by virtue of the fierce rays of the sun acting on the juicy fruit in a more or less confined space.

Extra large "Bucks" have been in a larger percentage than we normally get, making Currant drying difficult this year, the smaller fruit having to be dried excessively before the "Bucks" are properly cured; however, the major portion of Curants have now been dried and delivered to the packing sheds. So great has been the tonnage of deliveries, that many sheds are working double shifts to cope with the rush.

Each year brings fresh problems for us to face, and the most contentious one for this season is the refusal of packing sheds to accept any Sultanas showing the least sign of green tinge.

In spite of the fact that notices have been posted to growers to this effect, many loads of fruit have been sent back to have all traces of green bleached out. This decision has been arrived at through last year's experience, when our London buyers definitely refused to be interested in green tinged Sultanas at any price.

Ever since we departed from the old caustic soda dip, in an endeavour to produce

a light type of fruit,

by means of cold carbonate of potash dip and the mixed carbonate of potash-caustic soda combination, there has been a growing tendency to shade the fruit as much as possible while drying.

This shading process accentuates the green color in the dried article, which has to be bleached out later on. The bleaching may be done in many ways, either by being exposed to the direct rays of the sun, or by artificial heat from a dehydrator. In the event of green fruit being left too long on the rack it becomes case hardened, and has to be sprayed with a weak carbonate of potash mixture or plain water, then exposed to the heat of the sun and rolled up in hessian while still damp.

A weak carb. potash spray is preferable to plain water, as it has the ability of producing the golden color better than when sprayed with plain water. Water is inclined to make the fruit dull.

The question is often asked: "What is the greatest

color determining factor

in Sultanas?"

The writer unhesitatingly says that sugar content is the biggest influence. Provided that fruit has a range of from 11 to 13 Baumé, it will not brown when exposed to the full rays of the sun when the mixed dip is used according to the formula advocated by Mr. A. V. Lyon, M. Ag. Sc.

Fruit dipped with the cold carb. potash process has to be shaded to prevent browning, even though it shows a high sugar content, and if the fruit happens to be green in appearance when dipped, the work of bleaching then becomes one of much concern. It is a little known fact that the ultimate color of the finished Sultana is determined before it is even dipped, and that this determination is chiefly due to the amount of sunlight influence the fruit has been subjected to during the sugaring period, while still on the vines. Fruit growing in deeply shaded spots will not give a satisfactory golden color, the green chlorophyl being deeply seated in this case, but were we to adopt the practice of foliage lifting by means of extra wires on

the trellis, and allow more light to penetrate to the fruit, it would lighten the job of bleaching out the green tinge at harvest time to a considerable degree.

As it has been demonstrated from experiments carried out with artificial fertilisers that sulphate of ammonia has a marked influence on larger crop production, also that land can be brought to greater productiveness by increasing the amount of organic matter applied to the soil, this increased production invariably leads to a deterioration in quality.

This has been not only my own experience, but the experience of very many growers, who have raised their tonnages in recent years.

By Constant green manuring

and applying sulphate of ammonia we appear to upset a proper soil balance, which has to be made up with phosphoric acid and potash. Although experiments with potash have not been very encouraging, it would be a wide statement to make that all experiments would have negative results, as different soils might be a factor in this respect. Phosphoric acid, however, has given definite results when used in conjunction with green manuring, even up to 5 cwt. per acre for every ton of dried fruit produced.

It is extremely difficult to get any manurial recommendations for even scientific experiments, they are mostly full of contradictions and anomalies, and the scientist will not commit himself to any inaccuracies; this throws the practical grower more or less on his own resources, and we would be wise to follow the man who gets results.

Outstanding results have been obtained by our advanced growers in planting yearly cover crops, giving it a dressing of 3 cwt. super per acre, and supplementing this with a super dressing in the spring (before bud burst), making the total super applied, up to 4 to 5 cwt. for every ton of dried fruit harvested. To anyone not used to a heavy dressing of superphosphate this may appear excesive, but results prove this to be economically sound. As for potash, I cannot find a practical grower who has had definite results, but I believe there is room for further experiments on our various types of soil. It is my belief that a good deal of our low-grade Sultanas from high-yielding vines is due to lack of proper soil balance, and that the increased nitrogen from yearly cover crops will have to be balanced by making up these deficiencies, before we can raise the grade from heavy crops.

—"Nemo."

That Banana Skin Again.

After slipping on a Banana skin in Sydney, a man got up in a dazed condition: "Where am I," he groaned. "Ere you are sir," exclaimed an enterprising hawker, "map of Sydney for one penny."

Queensland.

QUEENSLAND BANANAS.

Extension of Brisbane Ripening Rooms.

AT A RECENT MEETING of the Banana Sectional Group Committee of the C.O.D., Brisbane, it was stated that as the ripening rooms in Brisbane had become inadequate, additional rooms were being constructed. The total capacity of the rooms would then be 1,800 cases, or weekly output of 2,500 cases.

The 1928 consignors received the final payment under the Banana Revolving Fund, in December. The total amount disbursed by the payments was £4,383/10/5.

Objection was taken to the degrading of Bananas in Melbourne; and it was decided to ask the Department of Agriculture to conduct an investigation.

MINISTER FOR CUSTOMS VISITS QUEENSLAND.

When speaking at Nambour, Queensland, on March 20, the Minister for Customs (Mr. White) stated that he was hopeful of getting a good concession from Canada in the near future to bring the Pineapple growers back to the same basis as previously existed. Mutual concessions had to be considered.

Mr. White stated that growers should not blame the Ottawa Agreement for Pineapple and Banana troubles. Australia, on the whole, had greatly benefited: the chief trouble with the Banana growers was over-production.

Mr. White visited the Pineapple cannery and the Banana ripening rooms of the Committee of Director of Fruit Marketing: he promised to do his utmost to influence the installation of Banana ripening chambers in the south.

Radio talks on various matters relating to agriculture are delivered by officers of the Queensland Department of Agriculure from Station 4QG, Brisbane, every Tuesday and Thursday, at 7.15 p.m.

A Profitable Sideline.

Good money is to be earned in the country by the snaring of water rats. Farmers and others living near rivers, swamps or large dams will have no trouble in seeing traces of these little animals, the skins of which are much sought after by manufacturing furriers to-day. They bring high prices right through the year.

Water rats frequent old rabbit burrows. Many ways have been devised in trapping. The jam tin snare is one of the best; make a cross-cut at the top of a jam tin and press the four corners in; place a piece of meat inside the tin; the tin should then be wired and pinned to the ground. When the rat pokes its head in to get at the meat the points of the four corners which have been pressed in prevent it from withdrawing its head. The method of skinning and drying should be the same as a rabbit, that is it should be gloved. Never cut up the belly, as this method is not correct, and lowers the value of your skins. Snares may be set in the afternoon, and visited to take the catch in the early hours of the morning.

Care should be taken to see that the skins are thoroughly dried before packing for transit or storing, otherwise they may arrive in a damaged condition.

Messrs. SLATTER & CO., of Nicholas Building, Swanston Street, Melbourne, will purchase these skins in any quantity, and pay top market price. On receipt of a parcel, they grade the pelts, and forward you a cheque by return mail. This firm are also buyers of other skins, and will always be pleased to receive consignments of same from the country.

GOODMAN'S

FRUIT TREES

Wonderful Quality

For 1934 Planting

Apples, Apricots, Cherries, Peaches, Pears, Plums, also all other Deciduous and Citrus Trees and Berry Fruits.

All leading varieties—clean, healthy, well-grown, true to name, heavy bearers of finest fruit for Home and Overseas Markets.

Each order receives expert attention, and our packing ensures perfect condition on arrival.

Goodman's Guarantee Satisfaction.

Write for Catalogue.

C. J. GOODMAN, Picnic Point Nurseries, Bairnsdale, Vic.

The Influence of Packing, Case Lining and Transport on Bruising in Apples

(By P. H. Thomas, Chief Horticulturist, and T. D. Raphael, M.A., Dip. Hort., Horticulturist.)

Republished by courtesy from "Tasmanian Journal of Agriculture."

FOLLOWING suggestions made by the Agent-General in the report on the 1931-32 Apple season, it was decided to carry out a series of experiments in regard to bruising of Apples.

It was thought that the prevalence of bruising in Tasmanian fruit might be attributed to one or all of the following causes:—1. Unsuitable packing methods. 2. Lack of adequate case lining materials. 3. Transport and handling prior to shipment.

The simplest scheme which could be evolved to investigate these factors was as follows:—

Three shipments of 40 cases each were packed and forwarded overseas. Twenty cases in each shipment were transported by road to Hobart wharves for export and 20 cases were conveyed by river steamer. On arrival at the wharves 10 cases from the road consignment and 10 cases from the river steamer consignments were retained for a week and subsequently examined by Departmental officers, full particulars in regard to bruising, etc., being noted. The remainder were despatched overseas for examination and report by the Agent-General.

Half the packed cases were lined with woodwool top and bottom only, whilst the remainder were packed and lined top, bottom and sides with corrugated cardboard strips. The different packs were allocated as indicated below, identification letters being branded on the various cases—

Retained at Hobart.

	Cases
AX—Strawboard packs sent by river steamer	5
AY—Strawboard packs sent by road transport	5
BX—Woodwool packs sent by river steamer	5
BY—Woodwool packs sent by road transport	5

Sent Overseas.

AX—Strawboard packs sent by river steamer	5
AY—Strawboard packs sent by road transport	5
BX—Woodwool packs sent by river steamer	5
BY—Woodwool packs sent by road transport	5
Total number of cases in shipment	**40**

The following ships were utilised for the experimental consignments:—

1. "Orsova"—end of March — 2½ in. Duke of Clarence Apples.
2. "Oronsay"—end of April — 2½ in. Jonathan Apples.
3. "Cathay"—early June — 2½ in. Sturmer Pippin Apples.

All the experimental cases were packed by one of the Packing Instructors. Great care was taken to ensure that all fruits were free from any visible bruises and that the cases themselves were uniform in size.

In the actual examination of the fruit, cases were opened at the top, sides, or both top and sides, and several layers removed. No really bad bruising was discovered, and it was found sufficient to divide the Apples into three groups — "moderately bruised," "slightly bruised" and "unbruised." In addition to this arbitrary selection a note was taken of "case bruising"—that is, injury caused to the fruit by contact with any of the six walls of the case.

It will be apparent from Table 1 that, though the examinations in England and Tasmania do not correspond very closely,

Apples illustrating "Slight" and "Very Slight" bruising.

General Bruising.

Results obtained from the Hobart wharf examinations and the overseas examinations are summarised in the following table:—

Table 1.

Shipment.	Wharf.	AX Medium %	AX Slight %	AX Free %	AY Medium %	AY Slight %	AY Free %	BX Medium %	BX Slight %	BX Free %	BY Medium %	BY Slight %	BY Free %
Orsova	Hobart	0	37	63	0	38	62	2	58	40	0	36	64
	London	14	17	69	7	37	56	8	39	53	12	36	52
Oronsay	Hobart	4	32	64	3	22	75	4	45	51	2	28	70
	London	0	67	33	0	30	70	0	70	30	0	79	21
Cathay	Hobart	5	50	45	2	41	57	10	47	43	8	55	37
	London	0	94	6	0	86	14	0	92	8	0	82	18
Summary	Hobart	3	40	57	2	35	63	6	50	44	4	42	54
	London	2	66	32	3	45	52	1	70	29	6	59	35
	Hobart & London	3	53	44	2	40	58	3	60	37	5	50	45

AX—Steamer transport, Strawboard lined.
AY—Road transport, Strawboard lined.
BX—Steamer transport, Woodwool. BY—Road transport, Woodwool.

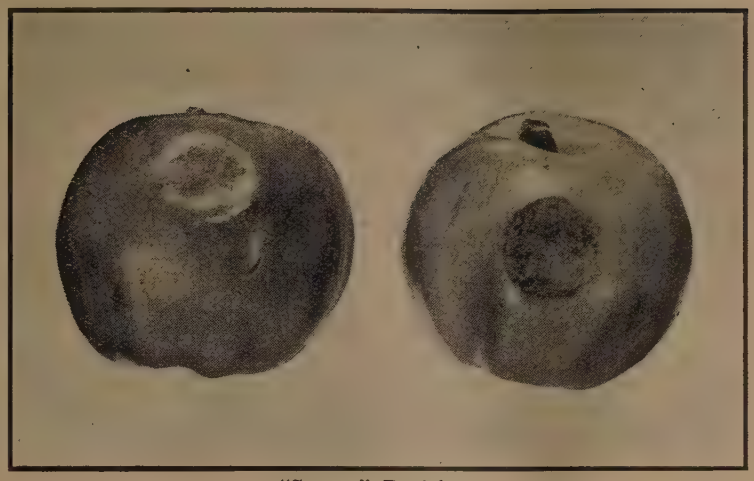
nevertheless, over the three shipments cases lined with corrugated cardboard contained much less bruised fruit than those only padded top and bottom with woodwool.

As regards the method of transport to the Hobart wharves, provided the cases are properly packed, there appears to be little to choose between boat and lorry.

Case Bruising.

The records kept in regard to bruises directly attributable to the fruit coming in contact with the sides of the case clearly indicate the advantages of using corrugated cardboard lining.

Reference to Table 2 will show that more than twice as much case bruising was present in the unlined series of cases.



"Severe" Bruising.

Table 2.

Shipment.	Wharf.	AX %	AY %	BX %	BY %
Orsova	Hobart	6	6	21	12
	London	17	13	20	24
Oronsay	Hobart	4	4	12	8
	London	13	5	30	50
Cathay	Hobart	6	7	19	17
	London	57	48	71	23*
Summary	Hobart	9	9	39	23
	London	24	17	38	30
	Hobart & London	16	13	38	26

*Much bruising caused by case warping and short linings.

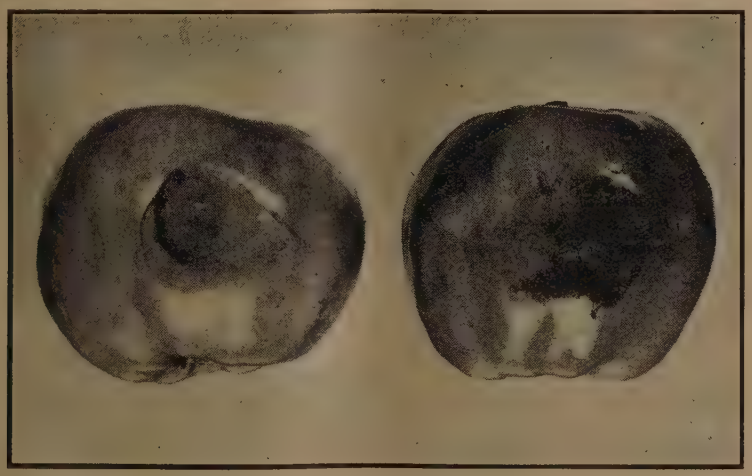
The large margin in favor of corrugated cardboard lining might have been even greater had not some of the pieces been cut rather short and normal case bruising taken place on the exposed Apples. Another point of great importance is the quality of the material used. It was found that a somewhat inferior grade had been selected for some of the experiments, many of the corrugations having broken down during transport, thereby affording but little protection to the fruit during subsequent handling.

Packing Bruises.

Although packing was performed carefully and fruit sized as closely as possible, in a number of instances packing bruises were fairly prevalent. A study of the packs adopted showed that where even very slight irregularity in case size or in the size and form of the fruit itself necessitated a further two Apples per layer, packing bruises were considerably increased. It is considered that in the hardwood case more bruising damage is annually caused by excessively tight packing than to any other factor. A few examples bearing on this point might be referred to here (ref. Table 1):—

1. In the "Oronsay" shipment the apparent superiority of BY—70 per cent. unbruised fruit over BX — 51 per cent. may be entirely attributed to the slacker pack adopted in the BY fruit.
2. In the "Oronsay" shipment a similar case to that mentioned above is also instanced by the better outturn of unbruised fruit in AY—75 per cent. as compared with AX, 64 per cent.
3. In the "Cathay" shipment the slight advantage of BX (43 per cent.) over BY (37 per cent.) is largely accounted for by the tight packs adopted in three of the five cases in the former section.

This season it was not found possible to test out more than one type of case, but the results obtained seem conclusive enough to extend the same principles, with certain minor modifications, to the Canadian type of case made of hardwood and to the ordinary softwood case. With suitable lining material and a fairly firm pack, there seems no reason that bruising of any commercial importance should be experienced in consignments that receive the normal handling they are subjected to during transport and loading operations.



Left: Specimen of "Case" Bruised Fruit.
Right: Specimen of Packing Bruise.
Both in the "Moderate" category.

Hubby Got the Lemon.

The following report appeared in a local paper:—

"On Friday last, the St. Agnes Church enjoyed a 'swap' social. Everybody brought something from home they didn't need and were willing to exchange. Some of the ladies brought their husbands along."

Export News and Notes.

Australian Fruit in U.K.

Effective Advertising Methods.

AS THE TIME is rapidly approaching when there will be active propaganda in England to assist the sale of Australian fresh fruit, it is of interest to recall some of the features of the 1933 effort.

A Committee was then constituted as follow:—W. G. Greenwood, A. E. Hyland, P. Mauger, F. R. Ridley, F. E. Yarker, C. H. Lewis, F. Capel, Col. Sir R. Eccles Snowdon, J. Wuille, J. Bradnum, S. Hawkins—all men well known in the London fruit world. The money available was estimated to amount to £8,570, being made up of contribution by the London trade £3,645; estimated yield from Australian growers £3,125, and estimated Commonwealth Government subsidy £1,800.

The official opening took place at Australia House on May 2, when the Right Hon. S. M. Bruce, Resident Minister in London, attended by prominent members of the trade were present. Very good press publicity was the result. Posters were exhibited on 300 vans covering London and suburbs and 200 motor vans radiating from London to the Home Counties and also to Liverpool, Manchester, Newcastle, Glasgow and intervening towns also carried posters 120 in. x 60 in.. Posters were exhibited on railway indicators throughout the Home Counties and the provinces, also at the important centres such as Liverpool, Glasgow, Manchester, Birmingham, etc. Advertisements appeared in the leading national dailies and also in the Liverpool, Manchester, Cardiff and Hull dailies. The papers chosen for advertising covered a total daily circulation of 12,469,482.

Eight men were engaged solely in canvassing fruiterers in connection with Australian Apples, these men carrying with them supplies of advertising material in order that they might distribute it to retailers and by personal supervision ensure that it was displayed.

Outdoor publicity and shop display work was carried on for the same time. This was a very striking form of advertising and attracted much attention. At the end of April, 18,000 retailers were circularised, giving particulars of the publicity arranged for Australian Apples and inviting retailers to apply for advertising material. The response was most encouraging and thousands of parcels were despatched and delivered. The eight outdoor men covered Lancashire, Yorkshire, Scotland, West Country, London and the Home Counties. Up to the time of the report they had called on 4,397 fruiterers, distributing advertising material.

Help From Australian Cricketers.

In the 1934 season there will be added publicity because of the presence of the Australian Cricket Team. The cricketers always generously assist with publicity for Australian fruit and other produce.

PEAR EXPORT CASE.

"Standard" Case Favored at Bridgetown, Western Aust.

There was a brisk discussion regarding the most suitable case for the export of Pears at a recent meeting of the Bridgetown (W.A.) Agricultural Society.

Mr. Scott said that the "Standard," or so-called "three-quarter" case, was the "best yet": it held 40 lbs. of fruit: trays were all right for special lines.

It was finally decided that for show exhibits of export Pears the standard ("three-quarter") case be used.

APPLE EXPORT CASES.

Only One Type for 1935 Export from Victoria.

Commenting on the decision of the shipping companies to recognise only one case for export in 1935, and to charge extra freight should cases other than the types selected be used, Messrs. Parnham Pty. Ltd., of 31 Queen-street, Melbourne, state as follows: "We quite appreciate the difficulties the shipping companies have in successfully and economically stowing their ships with fruit packages of various types that are forwarded for shipment. Further, until we can assist the shipping companies to economically stow their fruit cargoes, we have very little argument to advance for a reduction of freights. The buyers overseas have emphatically declared for the Canadian Standard Softwood cases, and it is our opinion that we should supply fruit in the type of case they prefer."

TRADE WITH GLASGOW.

Agent General Sees Possibilities of Development with Fresh, Canned and Dried Fruit.

The Agent General for Victoria in London (Mr. Richard Linton) has suggested to the Premier of Victoria (Sir Stanley Argyle) that the Victorian Government should call a conference of exporting interests in Melbourne, to endeavor to meet the demands of the merchants for direct trade with Scotland in Victorian products. It has been emphasised that types such as Delicious, Jonathan, Cleos., Granny Smith, and Sturmer are the most suitable for North Britain. Mr. Linton pointed out that direct representation and supplies would improve the market considerably, and that it was impossible to make sales of such quantities as minimum lots owing to the competition from California.

One firm had pointed out that, whereas four years ago Australian Apples were virtually unknown in Scotland, last year they had sold a quarter of a million cases. Good Victorian Pears and Oranges were also sought in Glasgow.

There were certain trade difficulties, continued Mr. Linton, connected with the Canned Fruit Control Board distribution system. Direct representation and supplies were desired: further, the Canned Fruits Board insisted on minimum sales of 1,000-case lots. It was pointed out that with the intense competition from California, it was impossible to make sales of such quantities as minimum lots.

VICTORIAN FRUIT SHIPMENTS.

The Victorian Department of Agriculture has furnished a statement showing the shipments of fresh fruit to U.K. and the Continent for the week ended March 17, as follow.—March 13: "Mooltan," to London, 7,802 packages Pears; March 15: "Port Auckland," to Rotterdam, 35,950 cases of Apples; to Hull, 30,416 cases Apples; March 15: "Clan Macdougall," to London, 33,162 cases Apples, 6,395 packages Pears; to Hull, 3,524 cases Apples; to Glasgow 1,682 cases Apples; March 17: "Jervis Bay," to London, 9,417 cases Apples; to Hull, 3,825 cases Apples; "Nestor," to Liverpool, 7,530 cases Apples; to Glasgow, 5,130 cases Apples.

The total shipments to March 17, 1934, were as follow:—London, 138,861 cases Apples, 59,938 packages Pears, 6,216 packages Plums; Hull, 60,562 cases Apples; Liverpool, 27,953 cases Apples; Glasgow, 24,332 cases apples; Rotterdam, 35,950 cases Apples; Hamburg, 25 cases Apples, thus making a total of 287,683 cases of Apples, 59,938 packages of Pears and 6,216 packages of Plums.

* * *

In the export trade Victoria has suffered a severe loss. With the shipping programme arranged, and running smoothly, there came early in March an unprecedented hot spell, with the shade temperature over the century for six days in succession, with the result that much of the crop just fell from the trees.

This was what might be called a "Jonathan" year. It is the backbone of Victoria's export, yet this variety was the one to suffer most.

TASMANIAN FRUIT SHIPMENTS.

Messrs. H. Jones and Co. Ltd., Hobart, Tasmania, advise under date March 19, quantities of fruit shipped overseas as follows:—February 16, "Westmoreland," 22,443 cases; February 17, "Hobsons Bay," 45,162; February 24, "Moldavia," 21,514; **March:** 2nd, "Bitterfeld," 25,039; 3rd, "Otranto," 15,749; 3rd, "Port Brisbane," 121,230; 10th, "Mooltan," 28,073; 13th, "Jervis Bay," 47,180; 13th, "Nestor," 25,999; 14th, "Cortona," 130,992; 16th, "Otaki," 54,621; 16th, "Port Adelaide," 99,959; 17th, "Barrabool, 43,002; 17th, "Orford," 13,750; 17th, "Kumara," 54,674. Total shipments to March 19 are 805,441 cases.

Hereunder is given the names of steamers sailing from Tasmania during April, with ports of discharge, the due date in U.K. or Continent being shown in brackets.

April 4: Tasmania to London, "Bremen," Liverpool (June 5); 6th: "Orestes," Liverpool, Glasgow (May 20); 7th: "Port Darwin," Rotterdam, London (June 3); 7th: "Esperance Bay," Hull, London (May 22); 9th: "Otira," London, Liverpool (June 5); 11th: "Bendigo," London (May 26); 12th: "Oronsay," London (May 24); 14th: "Clan Urquhart," Hull, London (June 2); 14th: "Pakeha," Liverpool, Avonmouth (June 3); 19th: "Nariva," Liverpool, London, Hamburg (June 22); 20th: "Port Huon," London, Hamburg, Liverpool (June 10); 21st: "Largs Bay," Hull, London (June 5); 24th: "Balranald," London (June 9); 24th: "Anchises," Liverpool, Glasgow (June 19); 26th: "Orama," London (June 7); 26th: "Leuna," Hamburg (June 11); 28th: "Port Caroline," Hull, London, Liverpool (June 14).

SOUTH AUSTRALIA.

Export of Fruit.

The South Australian Fruit Marketing Association advise that the shipments of Apples and Pears from South Australia to March 15, were as follow:—March 3, "Port Bowen," 32,004 Apples; "Bitterfeld," 17,599 Apples, 865 Pears; March 8, "Otranto," 1,925 Apples; 9th, "Taiora," 40,886 Apples; 15th, "Mooltan," 4,799 Pears. The following are forecast figures after March 15:—16th, "Jervis Bay," 10,000 Apples; "Nestor," 8,000 Apples; "Cortona," 50,000 Apples; 21st, "Barrabool," 10,000 Apples; 22nd, "Orford," 2,000 Apples, 750 Pears; 26th, "Somerset," 10,000 Apples; "Pt. Adelaide," 42,400 Apples; 28th, "Asphalion," 20,000 Apples; "Strathnaver," 780 Pears; April 2, "Ceramic," 10,000 Apples; "Strassfurt," 18,000; 5th, "Orsova," 2,500 Apples; 7th, "City of Winchester," 19,500 Apples; 9th, "Navasota," 50,000 Apples; 11th, "Pt. Darwin," 34,000 Apples; 16th, "Esperance Bay," 10,000 Apples; 19th, "Oronsay," 1,500 Apples, 500 Pears; 21st, "Bendigo," 10,000 Apples; 26th, "Strathaird," 8,000 Apples; 820 Pears; 30th, "Largs Bay," 10,000 Apples; "Nariva," 50,000 Apples; May 3, "Orama," 3,000 Apples, 500 Pears; "Balranald," 10,830 Apples; 4th, "Anchises," 4,000 Apples; 10th, "Cathay," 5,000 Apples; 14th, "Ulysses," 8,000 Apples; 16th, "Baradine," 10,830 Apples; 18th, "Moreton Bay," 10,000 Apples; 24th, "Mongolia," 6,000 Apples.

These figures make a grand total of Apples shipped after March 1 to May 24 of 512,910, and Pears 8,600.

In addition to the figures listed above, 1,800 cases of Apples and 200 cases of Pears have been shipped up to date to Colombo, and 2,580 cases of Apples and Pears to Batavia, Sourabaya, Samarang, Singapore, etc.

Prune Grader Wanted

Machine required for grading Prunes, new or secondhand. Send full particulars and prices to—

D'Agen, c/o "Fruit World," Box 1944, G.P.O., Melbourne.

New Export Apple Box.

Bulge Inside the Case Walls.

Takes up Less Space on Ships.

THE LATEST DESIGN in Apple export boxes is what is known as the Miller patent case, having been designed by Mr. Cyril Miller, of Melbourne, who for many years has been the pier representative of the Victorian Fruit Exporters' Handling Committee.

While the good points of the Canadian Standard case have been noted, the trouble was always with the bulge, as this was a prolific source of damage. On trains or in ships' holds cases are stacked bulge to bulge.

In the new "Miller" case the sides are a little deeper and the ends are a little deeper, the bulge being inside the walls of the case. In other words, the bulge is there to provide for firm packing, but it does not project outside the case. In all other respects the case conforms to the Canadian standard measurements. In stacking in railway trucks or in ships' holds there is a slight saving in space as under the present system of measurement the extent of the bulge is necessarily included.

Cleats Inside the Case.

The cleats are nailed at the top and bottom of the box and the boards which form the sides fit underneath these cleats, thus no nailing is necessary. This sounds surprising at first, but in actual tests it has been found that the case is perfectly strong, and the fact of their being no nails allows the timber to follow the fruit in any shrinkage which may occur, thus keeping the pack tight.

Many hundreds of cases have been sent away this season to export markets, and reports as to how the fruit carried in them will be awaited with the greatest of interest.

REPORT ON APPLE AND PEAR SHIPMENTS.

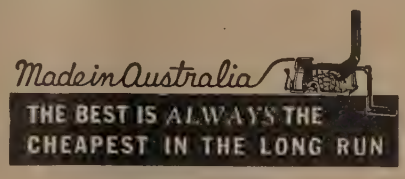
Messrs. White & Son Ltd., London Fruit Exchange, Spitalfields, London, England (The White Service) have prepared a report on Australian, Tasmanian and New Zealand Apples and Pears for the season 1933. This is published in book form, and is an excellent piece of work, the Messrs. White having gone into the whole matter thoroughly, the information given being set out clearly.

Details are shown of the quantities of Apples and Pears sent from each State, Tasmania and New Zealand to Europe during the 1933 season, and recommendations are made regarding varieties and grades for future shipments.

The shipments of Australian, Tasmanian and N.Z. Apples and Pears for 1933, are set out in detail in special charts, shipments to U.K. totalling 6,065,861 Apples and 812,667 Pears, while shipments to the Continent were 766,935 Apples and 36,446 Pears, thus bringing the total shipments to 6,832,796 Apples and 849,113 Pears.

Then price variations in U.K. are shown, each State, also Tasmania and N.Z., being dealt with by means of separate graphs.

Messrs. White and Son state that the following varieties of Apples can be considered amongst the most popular:—G. Smiths, Dunns, Sturmer, Alfriston, Worcester, Rokewood, King David, Jons., Cox, Newtown, Rymer, Demo., Yates,



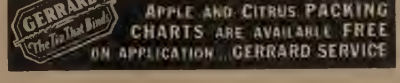
GERRARD

offers the true economy of lowest finished cost, a thoroughly efficient machine service, and Australian-made machines, and wire strapping designed to ensure a satisfactory, trouble-free pack.

GERRARD WIRE TYING MACHINES CO. Pty. Ltd.

119-125 Hawke St., West Melb., C.3.

SYDNEY, BRISBANE, ADELAIDE, PERTH.



French Crab, Cleos., S.P.M., Duke of Clarence, Rome, Dougherty, Del., F.C.P.

OVERSEAS FRUIT MARKETS.

Improved Outlook.

TASMANIAN ORCHARDISTS have had a very harassing experience with their overseas shipments during the past two seasons, and the majority of them are at present in a very difficult, and, in some cases, critical, position.

On both occasions, the ruinous prices were due, in the main, not to any inherent weakness in the market (or there would not have been the enormous quantities of Apples bought f.o.b.; nor would the liberal "guaranteed" advances have been given on consignments on an even larger quantity of fruit by other firms), but to three specific causes, all of them originating on this side of the world, and all of them, happily, removed this season.

These causes were, first, the inability of "the trade" in England to obtain, before the opening of the season, or even half-way through, any reliable information upon two vital points, namely, the approximate total quantity of fruit from Australia and N.Z. which the market would be expected to absorb, and the approximate date at which the last shipment was likely to arrive.

The second contributing cause was the excessive quantity of fruit which arrived in the latter part of the season, when supplies should have been rapidly decreasing, in order to make room for the Continental and English summer fruits, followed by the English and American Apples early in August. Shipping from Tasmania, instead of terminating before the end of May, was continued through June and on into the first week in July; with the result that arrivals, which should always cease by the middle of July at latest, continued right on into the first week in September, and quantities of N.Z. and Tasmanian Sturmers were still being offered in October, more than two months after the new season's English and American Apples had come on to the market.

The third of these major causes of trouble was the excessive quantity of "plain" grade fruit shipped from Tasmania, amounting to the incredible proportion of 12 per cent., or one case in every eight, of the total quantity exported.

Happily, none of these causes of detriment will recur this season. Early in January, the announcement was made that the total quantity of Apples and Pears to be exported from the Commonwealth this season would not exceed 4,720,000 cases, with the probable addition of about a million cases from N.Z., the programme of vessels has since been made available on both sides of the world, and the trade already knows, approximately, what the market will be expected to absorb, and when the last shipments may be expected to arrive. Furthermore, shipments have been suitably spread, with plenty of space available in March, for the early varieties; and, finally, the export of "plain" grade fruit and of varieties and sizes of Apples known to be unsuitable has been prohibited.

The heartening effect of these welcome reforms, coupled with the undoubted shortage in the Winesap crop in the United States, whence it is the principal Apple exported towards the end of their season, has had on the English and Continental fruit trade has been very marked, and the improved prospects for Australian and Tasmanian Apples and Pears are already reflected both in substantial buying orders and in numerous offers of "guaranteed" advances on consignments, guarantees which no one was expecting after the heavy losses sustained by guarantors last season, and which certainly would not have been repeated this season had there been the slightest sign of weakness in the outlook.

All that is now required, in order to ensure success is strict adherence to the published shipping programme, and to the regulations governing the quality of the fruit to be shipped.

In conclusion, might I suggest the desirability, in the interests of orchardists throughout the Commonwealth, of having the whole of the recently gazetted regulations, as well as any that may subsequently be proposed, submitted, before next season, to The National Federation of Fruit Brokers, with a request for an expression of opinion as to their suitability, or the reverse.

Yours faithfully,

THOS. BOSS-WALKER.

Hobart, Tas.,
6/2/34.

FRUIT TREES

ONE GROWER SAYS—

"The trees (750) arrived in excellent order and are of exceptional quality. Our local inspector said they were the best trees he had seen. You will get my order, about the same number, for next year."

QUALITY.
QUANTITY AVAILABLE.

Catalogues and Price Lists from—

John Brunning and Sons
Somerville Nurseries,
Somerville — Victoria Australia.
Established 1866.

PEAR EXPORT.

"Williams" Pears Successful on "Mongolia."

London, 13/1/34. — The shipment of Williams Pears forwarded to England on board the "Mongolia" arrived in a first-class condition, and were selling at 12/- to 13/- per case. This shows, that if properly packed and handled, the Williams Pear will be a payable proposition for export.

Mr. J. M. Ward, Superintendent of Horticulture, Victoria, stated that every possible attention was paid to this shipment,—in the picking, packing, pre-cooling, transport and stowage. Everything humanly possible had been done, and it was pleasing to know that success had been achieved.

CANCELLATION OF SHIPPING SPACE.

Owing to the heavy loss of fruit in Victoria, resulting from the recent hot weather, members of the Fruit Exporters' Handling Committee state it will be necessary to request cancellations of space for over 200,000 cases of Apples and 20,000 cases of Pears. The Committee has placed the matter before the Oversea Shipping Representatives' Association in Sydney, and all space booking will be affected from the later end of March until the end of May.

It is estimated that shipowners will suffer a loss of freight of £40,000.

CANNED FRUITS EXPORT.

Details of the exports of canned fruit from Australia for the month of January, 1934, are to hand from the Canned Fruits Control Board. The following figures are given (in dozen tins). Total export, 99,437 (30 oz.), 15,714 (16 oz.). The heaviest export was to U.K., being 83,206 (30 oz.) and 10,416 (16 oz.). The principal items included, Peaches 34,900 (30 oz.), Pineapples 26,600 (30 oz.), Apricots 9,556 (30 oz.), 1,776 (16 oz.), Pears 12,150 (30 oz.), 400 (16 oz.). In addition there were 2,800 (16 oz.) Pineapples sent to Canada. New Zealand received 11,542 (30 oz.) and 1,220 (16 oz.).

Mushroom Growing.

(By R. Mas, Sydney.)

ASSUMING that the reader became active on Mushroom growing immediately after reading my previous article, he, or she, would be just about finishing the treatment of manure. The point now to be observed is to see that no bits of manure remain unfermented. The likelihood of any pieces of manure that roll from the heap coming into contact with foreign matter makes it inadvisable to use it. On making the bed, select a position secure from seepage and currents of air. The place should be one which is naturally cool and dark. This should not be difficult to find between now and next spring. After the beds have been made and pressed down they should be from 6 inches to 8 inches in depth. Let the beds stay for one week before spawning. If a thermometer is used, bury the bulb of the thermometer three inches in the bed, and when it reads between 67 degrees and 75 degrees plant the spawn 6 inches apart and half inch deep. A week after spawning place half to one inch of moist, sandy loam over the top of the beds. It is advisable that this soil be limed, and sprayed with a solution of formalin, at the rate of 1 lb. formalin to 15 gallons water. Stack the soil in a heap, and let it stay for one week. Do not place soil on the beds if there is still a strong smell of formalin, as it would kill the spawn. If the formalin is slow in evaporating the heap of soil should be turned over, so as to give the formalin a chance to get away.

Pest and Disease Control.

After the bed is all complete, attention must then be directed to keeping the place free of insects. The insects which are almost sure to make an appearance are known as spring-tails, mushroom fly, mushroom mite, woodlice, cockroaches, and also rats. For spring-tail spray the beds with 1 fluid oz. nicotine to 4 gallons of water. For Mushroom-fly place a basin on the bed containing kerosene. If a light is suspended over the bed, the flies, attracted by the light, will drop into the kerosene. For woodlice and cockroaches, use paris green smeared on a slice of raw potato. Rats and mice should be dealt with as you would deal with them in the household.

The most harmful of the insects are the Mushroom-fly and the Mushroom-mite. These are almost sure to make an appearance. Do not use sulphur or any other disinfectant near the beds.

The top-dressing soil on the beds must be kept moist by light sprinklings of water. A watering can is too coarse, and should not be used. One should really have just enough water to counteract the water that has evaporated. Baby Mushrooms the size of a pin-head will appear six weeks after spawning. Usually they will grow in clusters. Cultivated Mushrooms take an average of eight days before they are large enough for gathering, and they should be picked when just about half-open.

Shortly after the beds are made, various forms of fungus or moles will make an appearance on the soil in the form of white patches. This will soon disappear, but a very dangerous and uncontrollable fungus, known as plaster mole, may also appear, and the Mushroom grower will not be able to tell the difference between the harmful fungus and the Mushrooms until the activity of the fungus becomes destructive. Its first signs are when baby Mushrooms reach the size of a marble, and have become covered with a fine mole, turns brown and dies. This disease has completely ruined entire crops of large dimensions. Its spread is particularly rapid when insects are about. Insects crawling over the fungus spread the disease to the growing Mushrooms.

The best method to be adopted is to pick all the infected Mushrooms and sprinkle a little Lysol into the holes from which the Mushrooms were pulled. To prevent the spread of any fungus diseases the grower must be careful to keep his hands perfectly clean, especially after touching infected Mushrooms. In using a light while inspecting the beds the grower should be careful not to leave it lying on top of the bed. The reason for this is that it may come in contact with the disease fungus, and be carried to other beds.

(To be Continued.)

RAIN! RAIN! RAIN!

The annual working exhibit of the Gay Sprinkler Irrigation Systems will be on view at the Royal Easter Show, Sydney, situated at the Paddington Entrance to the ground, between the cattle pens and the wood chop ring.

Recommended by the State Rivers and Water Supply Commission of Victoria as the most economical and low-pressure, even-spreading, overhead sprinkler system. Very successful for overhead irrigation of Citrus, Apples, Strawberries, Tobacco and Vegetables.

Gay Rotary Sprinklers are attached to portable pipe lines by means of a patent adjustable tripod for hillside and rough ground, and are easily moved by means of a separate link bolt coupling, which is thoroughly watertight, by hand.

Don't fail to see this exhibit if visiting Sydney Show.

Further particulars on application to—

Gay Sprinkler Agency Co.
236 Queen's Parade, Nth. Fitzroy, Victoria.

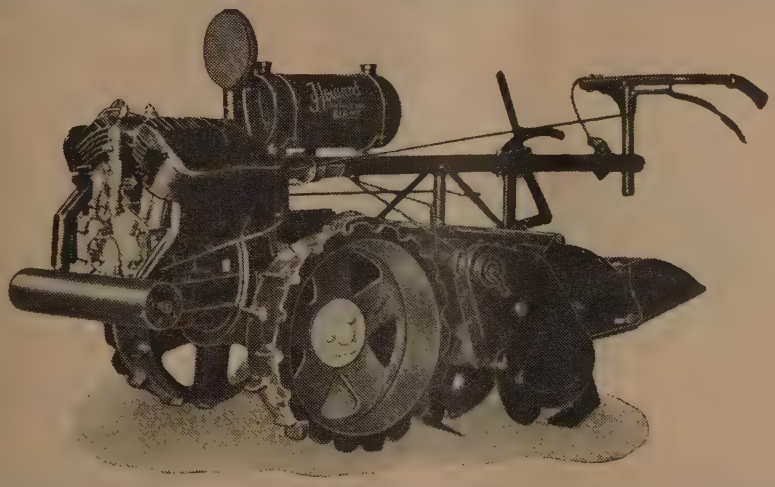
Mushroom Growing

Is Profitable whether Grown as a Hobby or Commercially. Add to Your Income by Growing Mushrooms.

Send 2/6 Postal Note and we will send by return mail our 1 lb. packet — enough for 26 sq. feet.

"SPANIARD" BRAND SPAWN
This Can Produce Over 30 lbs.
R. MAS No. 1 Wharf, Circular Quay
SYDNEY

Till Your Land with a HOWARD Rotary Hoe.



HOWARD ROTARY HOE "EIGHT," the ideal machine for Orchard Cultivation. Cuts 3 feet wide and up to 9 inches deep.

Models of the Howard Rotary Hoes are supplied for all classes of work.

For further particulars ring or write the Manufacturers:—

Howard Auto-Cultivators Ltd. - Northmead, Sydney.
Phones: UW 8984 and UW 8842.

South Australian Fruit Marketing Association.

The monthly meeting of the Executive of the S.A. F.M.A. was held at Adelaide, on March 23.

There were present, Messrs. H. J. Bishop (Chairman), A. R. Willsmore, F. B. James, G. W. Selth, P. R. B. Searcy, T. Playford, H. N. Wicks, J. S. Hammat, R. B. Pritchard, F. F. Redden, M. G. Basey, M. Vickers, A. O. Peterson, G. Quinn, and the Secretary. Apologies from Messrs. R. A. Cramond, and W. W. Miller.

Financial statement, showing balance in bank, £155/16/5, adopted.

Fruit Shortage.

Telegrams were received from the Australian Apple and Pear Export Council advising Victoria was likely to be short of quota by approximately 200,000 cases, and that Tasmania desired to take over this quantity, and asking the position in this State, and whether we were agreeable to the suggested transfer, and also asking if we would agree to allow shipment of "Rymers" to Continental ports only. It was resolved to advise the Australian Apple and Pear Export Council that we were agreeable to the transfer of Victorian space to Tasmania, and the inclusion of "Rymers" for the Continental ports, only provided other States agreed, and the Victorian and Tasmanian quotas were not exceeded. Also, to ask for the inclusion of "Strawberry Pippins" for all ports, and to advise that South Australia would probably require to transfer 50,000 cases of Apple space for May.

It was resolved that a circular be sent to all members of the Apple and Pear Freight Committee, asking them to advise by Wednesday, March 28, what quantity of May space they estimated they would not be able to fill, and giving the names of the vessels.

Certificate re Damaged Fruit Crop.

Mr. G. Quinn advised that he did not appear to have received the letter from the Association dated March 8th, in reference to his issuing a Certificate in regard to the damage caused by the recent heat wave. He stated he was quite willing to issue an official statement, which could be published in the "Advertiser," and copies obtained and made available to members requiring same.

Correspondence.

Letter from C. H. Tutton Pty. Ltd., in reference to Standard fruit cases.

Letter from "Fruit World," asking for loadings of Apples and Pears to date, giving names of steamers and destinations and programme of sailings for the balance of the season. Secretary advised that this had been forwarded.

Letter from the Australian Apple and Pear Export Council enclosing cheque £58/1/8, being balance of one-eighth of a penny refund on inspection levy for 1933 exports.

Letter from Australian Apple and Pear Export Council, advising that Mr. H. G. Colombie had tendered his resignation as Honorary Adviser to the Council.

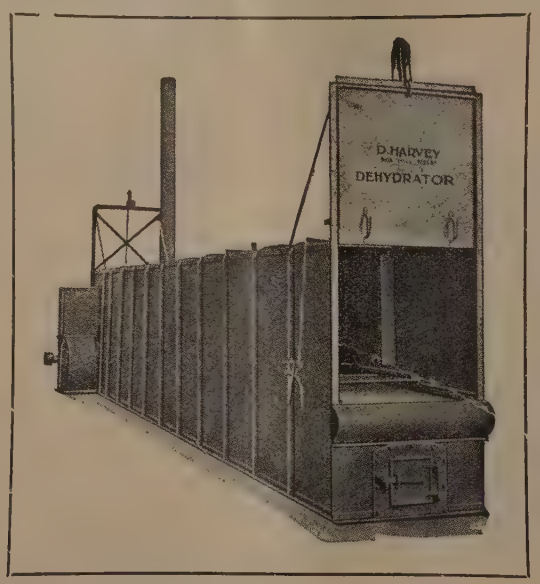
Letter from Royal Agricultural Society advising that the generous offer of the Association to donate an annual trophy for an Apple packing competition open to scholars under the age of 14 years attending any school, had been accepted by the committee, and asking the details in connection with the competition be supplied at an early date. It was resolved that Messrs. H. N. Wicks, A. O. Peterson, R. B. Pritchard, and M. Vickers be appointed as sub-committee to draw up the conditions.

Letter from Overseas Shipping Representatives' Association, Sydney, acknowledging receipt of notices of Termination of Freight Agreement from 18 signatories in this State.

Fruitgrowers' Relief Act.

Mr. J. B. Randell reported that the sub-committee, together with Mr. G. A. W. Pope, had conferred with the Minister of Agriculture in regard to the distribution of the £5,250 allotted to South Australia, and had agreed to recommend to the Government that the necessitous fruit grower should be one who failed to obtain a net return of 2/- a bushel

INSURE Your Dried Fruit Crops Against LOSS through RAIN



The HARVEY
Patent Re-circulation Forced Draught
DEHYDRATOR

Is the Most Efficient Dehydrator the World can offer to-day!

LARGE OUTPUT, ECONOMICAL TO OPERATE.

Now used by all the most up-to-date Packing Sheds, Companies and Growers for Drying Prunes, Peaches, Pears, Apples, Apricots, Sultanas, Tomatoes, &c.

REMOVE ANXIETY OF BROKEN SEASONS CAUSED BY DAMP SPELLS BY PLACING YOUR ORDER FOR EARLY DELIVERY

Avoid Lightweight Sultanas through having to Pick Too Early!

When you own a HARVEY DEHYDRATOR you do not have to start Picking before the full sugar content is there—you can dry in spite of the early rains which invariably set in before the drying is finished.

PRUNE GROWERS—Write for particulars of Latest PRUNE GRADER

FRUITGROWERS—Grade your Fruit with the "HARVEY" APPLE and PEAR GRADERS.

REMOVE SPRAY with the "HARVEY" APPLE WASHER.

D. HARVEY, Orchard Implement Specialist, BOX HILL, VICTORIA

INTERSTATE REPRESENTATIVES:—

New South Wales.—Buzacott & Co. Ltd., 7/11 Market Street, Sydney.
Queensland.—Clark & Fauset Ltd., 73 Eagle Street, Brisbane.
South Australia.—Silbert, Sharp & Bishop Ltd., Rundle Street, East, Adelaide.
Tasmania.—Max Geeves Pty. Ltd., Davey Street, Hobart.
" Clements and Marshall Pty. Ltd., 119 Cimitiere Street, Launceston.
" Harry Murray, Devonport.

for fruit off trees when ready for packing. Details in regard to drafting application form, etc., be left to the Government Produce Department.

Royal Agricultural Society Fruit Committee.

It was resolved that the Association should nominate a member for the fruit committee of the Royal Agricultural Society when nominations are next due.

The President submitted a draft of a letter to the Federal Minister of Commerce expressing thanks for his efforts in regard to obtaining Pear space for this State, also setting out the very unsatisfactory manner in which both Pear and Apple space had been allocated this season. The draft letter was approved, and resolved that it be forwarded. It was also resolved to record in the minutes an expression of appreciation to the Chairman for the work he had done in endeavoring to obtain the necessary space this season.

Research Sub-Committee.

Mr. H. N. Wicks reported that members had submitted reports in regard to codlin moth control experiments, and they had also discussed the effect of the recent heat wave on the season's crop, and had suggested the advisability of obtaining an official statement from Mr. G. Quinn in regard to the effect of the heat wave.

Contract Form.

Mr. P. R. B. Searcy suggested that we should place on the agenda at the next meeting of the Australian Apple and Pear Export Council, the question of obtaining a recognised form of contract for selling Apples overseas. At the present time, in the majority of cases, all the risks were placed upon the exporter.

It was resolved to write the different Associations asking for copies of the contracts generally used, with the idea of drafting a common contract for the whole of Australasia, which would be the recognised standard contract in connection with Apple sales overseas.

Apple Export.

It was resolved to ask the press to give publicity to the fact that there would be an accumulation of shipping early in April, and the packers should be asked to expedite operations with a view to having the maximum quantity delivered ready for shipment during the first ten days of April.

Herbert Wilson

Pty. Ltd.

Wholesale Fruit Merchants and Commission Agents

Nos. 1 and 10 Wholesale Fruit Market Melbourne.

Accredited Agents for Victorian Central Citrus Association and Affiliated Association.

Bankers: National Bank of Australasia. (Western Branch) Melbourne.

City Telephone F6444.

Private 'Phone M3055.

TASMANIA

Leading Australian Firm of Fresh Fruit Exporters.

Manufacturers IXL Jam and Canned Fruits.

Hop Factors—Largest Cool Stores for Hop Storage in Commonwealth.

All Orchard Supplies available at all times.

Agents for—Associated Evaporated Apple Manufacturers, Eagle, Star & British Dominions Insurance Co. Ltd., Federal Steam Navigation Co. Ltd., Scottish Shire Line of Steamers, Osake Shosen Kaisha.

Correspondence Invited.

H. JONES & CO. PTY. LTD.

Hobart.

RIDLEY & HOULDING

Covent Garden Market, LONDON

Specialists in Australian Fruit.

Solicit consignments of Apples, Pears, Etc.

Our record of over 30 years' standing in the handling of Australian fruit, with satisfactory results, is a recommendation for growers to ship their fruit to our house.

REPRESENTATIVES—

International Fruit & Mercantile Company Ltd., Melb., Vic., Australia; Pitts & Lehman, 129 Pitt St., Sydney, N.S.W.; and A. J. Walshe & Co., Hobart, Tasmania.

"Scald" in Granny Smith Apples

Summary of Control Experiments in Western Australia.

IN ORDER TO ASSIST in the search for knowledge regarding the best method of handling the Granny Smith Apple, experiments were conducted at the Illawarra Orchard, Karragullen, W.A., during the 1933 season. The following summary is published by courtesy of the Apple Sales Board:—

A total of 4,035 Apples were examined.

Wrapping.—All the Apples were wrapped in either greaseproof (K.V.P.) or oiled wraps. The testing of the relative merits of the two papers was only incidental, and results are not conclusive; this aspect will be tested specially in 1934.

Temperature.—The mean average temperature of storage chambers was 33½ degrees F. It is proposed to increase this to 34 degrees F. or more, experimentally, next season.

Sizes.—The main experiments were confined to 2½ in. and 2¾ in. sizes, but some 3 in. were also tested.

Dates.—Picking times ranged from April 8/10 to 22/27. Storage was effected throughout within a few days of picking. Growers in other districts should observe the color indications as to time of picking—the dates will vary with locality and season.

Examination.—Scald was first noticed on August 24, but the examination for record purposes was made on November 3 and 6.

Results.—These are most striking. Picked at a correct stage the Apples scalded reached a maximum of 5¾ per cent. Picked only 14 to 17 days early the scald developed in from a minimum of one quarter up to two-thirds of the total Apples so treated.

(N.B.—Granny Smiths picked too late seldom cause the same loss as those which scald. If you cannot pick at the correct time err a day or two on the late rather than on the early side.)

Results.

	A	B	C
Picking date	April 8/10.	April 20/25.	April 22/27.
Color when picked	Green, but losing very dark green color.	Not quite so green as (A).	Definitely lost dark green color.
Color ex store	Green to yellow-green.	Yellow-green, suitable for trade requirements.	Yellow green, slightly lighter than B and definitely lighter than A, but not so yellow as a ripe Cleo. Skin greasy. Suitable for trade.
Percentage of scald	26.5% to 62%.	8.8%.	2.8% to 5.74%.

N.B.—These were special experiments and should not be read as suggesting that Illawarra suffered a bad year with scald; such was not the case. The early experimental pickings were made deliberately to test their effect on storage experience.

Answers to Correspondents.

"R.H.F.," Bowenville, Queensland, writes: Can you tell me if European and Japanese Plums and Peaches will unite and bear well if grafted on Apricots—what the stock of the Apricots is I do not know.

Answer (By G. W. Peart, Bairnsdale). —The Apricot is not a suitable stock at all for any of the Plums or the Peaches.

Cider Making. — "G.M.", Shepparton, writes:—Seeing an article by Mr. H. Lake on cider making I attempted to make some, following Mr. Lake's instructions. Everything was apparently all right till this spell of hot weather, when it appears that the cider has lost its ferment and has turned to vinegar. I have it in open-mouthed stone jars. It was made from ordinary Jonathans and Five Crown Apples. I would very much appreciate any information you could furnish on the matter. Are stone jars suitable or would barrels be better? Also should the tops of the jars be covered with fine muslin? Is it natural for the cider to go flat and smell like vinegar, also it tastes sour? Should it be pressed as soon as it is shredded or allowed to stand as pulp for a while?

Answer (by H. Lake, Bridgetown, W.A.).—I tried open mouth stone jars but had same experience as "G.M.", and now I use bottle-neck jars two and three gallons each and keep same filled right up to the neck. The open jars expose too big a surface to air. I also use a couple of five gallon crock barrels, but keep surface well up into mouth, again not to expose too big a surface to air. Tops of crocks do not need covering. Pulp should be pressed as soon as possible after crushing. If allowed to stand it gets a brown tinge and juice goes cloudy, and it is harder to clarify. I am sure that if "G.M." had used crock jars bottle neck he would not have had a failure and cider would not have gone flat and sour as he states.

Mussel Scale. — "S.B.", Portland, writes: Some of my Apple trees are infested with mussel scale. I sprayed last year as follows:—

1st block—lime sulphur—one gallon to 10 gallons of water during June with no success.

2nd block—red oil—one gallon of oil to 15 gallons of water. This was not successful, but better than the first. Could you let me know any other method of control? One grower suggests red oil (1-15) as late as possible before bud burst.

Answer (J. M. Ward, Superintendent of Horticulture, Vic.). — Regarding the eradication of mussel scale, it is often necessary to follow up the pest with a second spray, owing to the fact that the scale adheres very closely to the bark, and that it frequently increases in such numbers as to overlap quite freely. The best spray to use is tar distillate, in mid-winter only; Kleenup, also a winter spray, is most effective.

Saturday, 21st April at 2 o'clock

in the

MECHANICS' INSTITUTE, SOMERVILLE

Sale by Auction

of

Choice Grazing and Orchard Properties

on the

Favoured Mornington Peninsula.

L. A. Fairbairn & Co. under instructions from Mr. J. L. Byrne, who is leaving for England in May, will offer by PUBLIC AUCTION in the Mechanics' Institute, Somerville, on Saturday, 21st April, at Two o'Clock, his well-known properties situated on Eramosa Road, two miles from Somerville and Moorooduc—about 30 miles from Melbourne, and within easy distance of Frankston and Mornington—splendid roads, as under:—

BINNAK ORCHARD

A TOTAL AREA OF ABOUT 100 ACRES.

The Orchard itself comprises about 58 acres of Export and Interstate varieties of Apples and Pears, mostly just coming into full bearing condition, planted in the following varieties:—

APPLES—2,000 Jonathans, 1,000 Romes, 500 Alfriston, 330 Five Crown, 250 Granny Smith, 175 Statesman, 100 Stewart's Seedling, 120 Duke of Clarence, 70 Dunns.

PEARS—420 Packham's Triumph, 200 Keiffer.

About 25 Acres are nicely laid out in suitable paddocks, sown down with well established Rye Grass and Subterranean Clover, and the balance of the area is good grazing country, partially cleared, with a good supply of firewood.

Improvements.—New 5-roomed W.B. House, bathroom, pantry, porch, verandah—every convenience—telephone. Outbuildings consist of garage, large packing shed, tool-shed, stables, implement shed, fowl houses and yards—all in excellent order. Good water supply—windmill, 2 large dams and 4 good tanks —a never failing supply.

"Binnak Orchard" is one of the best, well equipped, and most up-to-date properties in this favored locality—the trees are carefully selected and expertly tended, and the whole orchard, appointments and equipment are in splendid order.

Also

CHOICE GRAZING PROPERTY

immediately joining "Binnak Orchard" and comprising an area of about:—

223 Acres

of exceptionally rich fattening and grazing land—excepting a small portion carrying valuable timber for firewood, the whole area is cleared and laid down in well established Rye Grass and Subterranean Clover, which it grows to perfection, and carries a wonderful body of feed—all nicely laid out in numerous paddocks—exceptionally well and securely fenced—well and permanently watered. Eminently suited for all classes of fattening—sheep or cattle, or would make an ideal dairy farm.

Annual rainfall about 30 inches. Droughts practically unknown.

Land on the Mornington Peninsula is rapidly increasing in value—these are admittedly two of the best properties in this attractive locality and handily situated as they are to the Melbourne and local markets, should command the attention of any buyers in search of a good sound investment or income producing properties.

The two properties will first be offered as a whole, and if unsold each place will then be submitted separately.

Buyers interested can attend the sale with every confidence, as Mr. J. L. Byrne is leaving for England in May and is a genuine seller.

Terms at Sale. Inspection Invited.

Further particulars will be supplied and all arrangements for inspection will be made for prospective buyers on application to the Agents:—

L. A. FAIRBAIRN & COMPANY,
St. James' Buildings,
Cr. Bourke and William Streets, MELBOURNE.

Telephone: Central 4730.

Sydney Royal Show.

THE FRUIT DISPLAYS at the Sydney Royal Show at Easter were of wonderful quality.

The Fruit Pyramids.

Batlow won the prize for the best Apple pyramid for the third year in succession (90½ points). The others, in order were Bathurst (84 points), Hartley Vale (82½), Tallong (80), Goulburn (79½). Pear Pyramids.—Batlow (86½ points), Goulburn (79½), Tallong (78½).

Among the prize-winners for Apples and Pears were,—A. & E. Vanzella, Butz Bros., G. Temple, G. E. Philp, Lewis Bros., P. M. Baaner, R. R. Smith, Morris & Sons, C. C. Barberie, J. Holmes, J. G. Hergenham.

Royal Special Export Apple Prize: Apples for export (in case), four cases, two each of two distinct varieties suitable for export. One case of each variety (two cases in all), staged and judged at the show; the other two cases to be forwarded to London and judged there: Butz Bros. (90½ points), 1st; R. A. W. Bailey (90), 2nd; P. M. Baaner (87½), 3rd.

Mr. W. P. Hutchinson, of Somerville, Victoria, a member of the Executive of the Victorian Fruit Marketing Association, who visited the Sydney Show, speaks in terms of highest appreciation of the fruit. The pyramids, he said, were a real show in themselves,

Australian and New Zealand Fruit Trade

Market Notes and News — Prices, etc.

REPRESENTATIVE FIRMS, FRUIT MERCHANTS, AGENTS, EXPORTERS.

Advertising in this Journal.

NEW SOUTH WALES.

Sydney:

CITY FRUIT MARKETS.

Associated Growers' Selling Agency Ltd.
Black, H., & Son.
Chilton, F.
Fruiterers' Supply Company.
Griffiths Fruit Supply Ltd.
Holmes, J.
Hop Lee & Co. Ltd.
Lockart, H. C.
Moss, J., & Sons.
Musgrove, W., & Son.
McEnally, R.
Rogers, F. H. G.
Slater, Jas.
Schuster, A. E.
Smith, L.
Stubbs, J.
Walters, M., and Co.
Young, Frank.

VICTORIA.

Melbourne:

Bell, Banson Pty. Ltd., Wholesale Fruit Market.
Cave, F., & Co. Pty. Ltd., Wholesale Fruit Market.
Davis, J., Pty. Ltd., Wholesale Fruit Market.
Frankel, H. & S., Wholesale Fruit Market.
Lister, G., Pty. Ltd., Wholesale Fruit Market.
Millis, A., & Sons, Wholesale Fruit Market.
McLean, N. N., Pty. Ltd.
Mumford, J. G., Wholesale Fruit Market.
Pang & Co. Ltd., H. Louey, Wholesale Fruit Market.
Patrikeos, P. A., Wholesale Fruit Market.
Pitt, A. E.
Producers' Dist. Society, Wholesale Fruit Market.
Ross, J. W., Wholesale Fruit Market.
Sang Goon & Co., Wholesale Fruit Market.
Silbert, Sharp & Davies, Wholesale Fruit Market.
Stott & Sons, T., Wholesale Fruit Market.
Tim Young & Co. Pty. Ltd., Wholesale Fruit Market.
Tong, W. S., Wholesale Fruit Market.
Vear, F. W., Pty. Ltd.
Wade, H. M., & Co., Wholesale Fruit Market.
Wilson, H., Pty. Ltd., Wholesale Fruit Market.
Wing, R. A., & Co., Wholesale Fruit Market.
Wing, Young & Co., Wholesale Fruit Market.
Woolf, G., Wholesale Fruit Market.
Wholesale Fruit Merchants' Assn., J. D. Fraser, Temple Court, 428 Collins Street, Melbourne.
Young, J. H., & Co. Pty., Wholesale Fruit Market.

Brisbane: **QUEENSLAND.**

Barr, A. S., Fruit Exchange.
Cooksley & Co., Fruit Exchange.
Geeves, H. V., Fruit Exchange.
Jacklyn & Jacklyn.
Robsons Ltd., Fruit Exchange.
Winters, E.

Hobart: **TASMANIA.**

Eric Burgess Pty. Ltd., 88 Collins Street, Hobart.
E. R. Cottier Pty. Ltd., Temple Place, Macquarie Street
Jones, H., Co. Ltd., Fruit Exporters.
Peacock, W. D., & Co., Fruit Exporters, and at London

Launceston:

Bender & Co. Pty. Ltd., 100 Elizabeth Street.

Dunedin: **NEW ZEALAND.**

Co-operative Fruitgrowers of Otago Ltd.

GREAT BRITAIN.

Hull:

London and North-Eastern Railway, 7 Bridge-street, Sydney, N.S.W.

London:

Lewis, E. H., & Son Ltd., Covent Garden, London.
Margetson & Co. Ltd., Covent Garden, London.
Monro, Geo., Ltd., Covent Garden.
Pask, Cornish & Smart, London.
Port of London (Capt. A. W. Pearse, 10 Bligh St., Sydney).
Poupart, T. J., Ltd., Covent Garden.
Ridley, Houlding & Co., Covent Garden.
White & Son Ltd., London Fruit Exchange, Spitalfields, E.1.

Manchester:

The Port of Manchester Rep., W. J. Wade, [illegible] Street, Sydney.

Bremen: **GERMANY.**

Fruchthandel, Gesellschaft.

Hamburg:

Astheimer, P. H., & Son, Fruchthof
Gustav Bey, Hamburg.
Int. Fruit Import Gesellschaft.
Lutten, J. H., & Sohn, Hamburg
Stier, Aug., Fruchthof.
Timm & Gerstenkorn.

Sydney Market Report.

Month of March.

TURNOVER during the past month showed an improvement as compared with February, and most varieties moved freely. Weather conditions were generally favourable throughout the period. Supplies of Apples were heavy, consignments coming to hand from Tasmania, Victoria, and Queensland, as well as from all local districts.

Export shipments were carried out to programme, and the quality of the fruit sent overseas showed a distinct improvement on February shipments. The quantity of inferior Apples marketed was greatly in excess of that of normal years, while the result of the restrictions placed on export fruit was noticeable in the sizes and varieties of Apples received from Tasmania.

Prices for popular varieties, which were satisfactory early in the month, gradually eased as arrivals became heavier, and values ruling at the time of writing are low, except for really choice lines of good red Apples. Unpopular varieties and outsizes will barely return growers the cost of marketing.

Enquiry from shippers for Granny Smiths was very firm early in the month, and prices for this variety moved up. There was little demand from the retail trade for Granny Smiths, which at present are looked on as cookers, and

F. CHILTON

ESTABLISHED 1894

FRUIT COMMISSION AGENT

Licensed under Farm Produce Agents Act

Highest Market Prices — Prompt Returns — Reliable Advice

Registered Address for Telegrams and Cables, "CHILTONS"

References :— Bank of N.S.W., Haymarket, Sydney and Growers throughout Australia

CITY FRUIT MARKETS, SYDNEY

F. Chilton, Established 1894.
Fruit Commission Agent,
Licensed Under Farm Produce Agents' Act.
Highest Market Prices, Prompt Returns, Reliable Advice.
Registered Address for Telegrams and Cables—
"Chiltons."
City Fruit Markets, Sydney.

FRUITGROWERS!
For Satisfactory Results, Send Your Fruit to
F. H. G. Rogers
Fruit Selling Expert,
Municipal Markets, Sydney.
Shipping No. 83. Established 1900.

Established 1890. Block 147
CITY MARKETS, SYDNEY.
Licensed Fruit Commission Agents.
M. Walters & Co.
Sales conducted under direct supervision of proprietors.
Consignments Solicited.
Phone MA 4602

Regular consignments of fruit well packed and graded realise best prices.

Growers Obtain Top Prices by Consigning to:—
H. J. GREENTREE
(Est. 1920)
MUNICIPAL MARKETS, SYDNEY.
Shipping Nos.—Tasmania 228, Q'land & Victoria 40.
Phone: MA 1769.

R. McEnnally
Licensed Farm Produce Agent,
Information and A/c Sales Promptly.
CITY MUNICIPAL MARKETS, SYDNEY.
References All Growers Throughout Australia.
Phone: MA 1955. Private: J 4401

Telephones: Est. 1896.
MA 4432, Epping 840. **Bankers:**
Bank of N.S.W., Haymarket.
H. BLACK & SON,
Licensed Farm Produce Agents,
17 City Markets, Sydney.
Consignments of Fruit, Tomatoes, and Other Produce Received for Sale.
Cases Sent on Application.
Cash and Account Sales Rendered Weekly.

FRUIT GROWERS—Seeking Expert Salesmanship, Satisfactory Results and Prompt Returns,
CONSIGN YOUR FRUIT TO
L. SMITH
Licensed Farm Produce Agents,
Bank References: Commercial Bank, Elizabeth Street, and N.S.W. Fruitgrowers.
Shipping No. 235. **Phone: M 3045**

Telephone MA 3846. **Established 1900.**
W. MUSGROVE & SON
Licensed Farm Produce Agents,
8 City Fruit Markets, Sydney.
Our Motto—Quick Sales and Prompt Settlements.
Forwarding Numbers:
Tasmania, Victoria, S. Australia, **No. 53.**
Queensland, Northern Rivers, **No. 18.**

GROWERS!—Consign your Fruit to:—
JAMES SLATER
21 CITY MARKETS, SYDNEY
Postal Address: Box 36, Haymarket P.O., Sydney.
Established 1882.
SHIPPING NO. 19. 88 VIC. & TAS.
Stencils, Advice Notes, etc., on Application.

Associated Growers' Selling Agency
Licensed Farm Produce Agents.
CITY MUNICIPAL MARKETS.
Manager: BRUCE R. SMITH.
Reliable Service, Prompt Advice and Returns.
Highest Ruling Rates.
Phone: MA 1828.

MACDERMOTT AND SHEEDY
Licensed Farm Produce Agents
City Municipal Markets, SYDNEY. - Postal Address: P.O. Box 75, Haymarket.
Efficient and Prompt Service, Reliable Advice
Forwarding Numbers:— Tasmania; Victoria. South Australia **No. 63.** Queensland - - - - **No. 61.**
Agencies: LONDON and HULL. *Consignments Arranged.* References Bank of N.S.W., Castlereagh St., Sydney
PHONE: MA. 1363 **Telegraphic Address—"Citrus" Sydney.**

there are signs that the increase in values has reduced the demand from overseas.

Pears sold well throughout the month, supplies not being heavy, except in the case of Williams ex cold store. The bulk of these were too ripe, and had to be sold quickly to avoid loss. Packhams were in good demand for shipping orders, and sold well. All other varieties realised prices equal to or better than the average of this month in previous seasons.

Bananas were in very heavy supply, and values were low for the first half of the month. With a little better demand, and a slight falling off in supplies, prices improved during the past fortnight. A shipment of Fijis in the early part of the month sold at low prices, which must have meant a heavy loss to growers.

Grapes were in ample supply, and, with a steady demand, values held up fairly well throughout the period. The demand for Ohanez showed a falling off as compared with other years, and this was due to the competition from Victoria. The quality generally of the Victorian fruit is better than the M.I.A., while the berries are larger.

Oranges were in light supply, the bulk of the Valencias having been marketed. Some lines from the M.I.A. were of splendid quality for this period of the year, the fruit being juicy and of good colour, and best sizes sold up to 16/-. The Coastal Valencias were not of the quality of the previous years, with the exception of a few brands. Second crops, both of Valencias and Commons, were on the market. They were lacking in colour, but sold at fair values owing to the shortage of main crop fruit.

Lemons were in normal supply and sold at fair prices throughout. Demand for choice cured fruit was firm, and all good lines sold at payable prices.

Plums were in poor demand, and the keeping quality was against high values. Supplies were about the average, but prices were unpayable except for a few outstanding lines.

Peaches were in good supply, but sold well in the early part of the month. Condition went off later and prices eased in consequence.

Passionfruit.—Supplies were normal, with only a fair demand. Special quality sold at better values, but medium quality lines realised low prices.

Enquiry for **Cantelopes, Californian Cremes** and **Honey Dew Melons**, was steady, and choice lines sold well throughout the month at payable prices.

Pineapples were not in heavy supply, but a fair percentage of the fruit was affected by blister and had to be sold at low prices. With a firm demand, choice lines sold well with little variation in prices.—P. S. Macdermott.

NEW SOUTH WALES.

Sydney.—The market representative of the Fruitgrowers' Federation of N.S.W. advises under date March 26, prices as follows:—Apples: Alf. 3/- to 4/6, Cleo. 4/6 to 6/6, Del. 5/- to 9/-, Dunns 4/- to 5/6, French Crab 4/- to 6/-, G. Smith 5/- to 10/-, Jons. 4/6 to 8/-, King David 4/- to 6/-, L. Pippin 3/- to 6/-, Lady in Snow 4/6 to 6/-, McIntosh Red 4/- to 5/6. Pears: B. Bosc and B. de Cap. 5/- to 6/6, Gansell's Bergamot 4/- to 6/-, Howell 4/- to 6/-, Packhams 6/- to 9/-, Williams 5/- to 7/- (ripe 2/- to 5/-), W. Cole 5/- to 9/-.

Comments on the Apple and Pear Position.—Approximately 27,000 cases of Apples including a few Pears are arriving from Tas. to-day. Vic. is also forwarking Jon. heavily and G. Smiths are arriving from Qld. Tas'n varieties not quoted can be regarded as realising in the vicinity of 3/6. The Apple market is very depressed, due to heavy arrivals of unwanted varieties, windfalls and inferior fruit, which, although frequently marked higher are actually plain grade. Choice fruit is being withheld from many districts, but the supply at present is ample for requirements. Pears.—The Williams variety is now unpopular; Packham's and W. Cole being preferred. Small sizes are in demand.

F. W. VEAR
Pty. Ltd.
FRUIT AND VEGETABLE SALESMEN
Commission Agents Exporters
28 New Wholesale Fruit Market,
MELBOURNE - - VICTORIA
Highest Market Rates Assured
Prompt Settlements
Fruit Exported to All Countries
Supplies of Wood Wool, Cases, Nails, Wire and other Packing equipment always on hand.

Bananas: N.S.W. and Qld. 9/- to 16/- trop. case, Fiji 20/- to 26/-.

Citrus: Grapefruit, Cal. 32/- Calif. case; Lemons, N.S.W. colored 6/- to 12/-, Mangrove and M.I.A. cured up to 14/- bush.; green to 8/-, plain 3/- to 6/-, Vic., S.A. and Qld. 10/- to 15/- bush.; Oranges: Vals. 5/- to 13/-, few 15/- bush.; Calif. Navels 30/- to 32/- Calif. case.

Grapes: N.S.W. White Sherry 3/6 to 4/-, spec. 5/-, Inland Black Muscat 5/- to 7/-, inferior from 3/-; Doradillo 3/- to 4/- half; Gordo 3/6 to 5/-, Cornichon 4/- to 5/-, spec. to 6/-, Waltham Cross 4/- to 5/6. Except for the White Sherry variety Metropolitan Grapes are finished. Steady prices are being experienced for Inland Black Muscat, whereas Cornichon from the M.I.A. have eased slightly. Passionfruit, N.S.W. 2/- to 5/- half, few special higher; Peaches, Inland 4/- to 6/- bush., few to 7/6. Chief supplies are Pullar's Cling from the M.I.A. Persimmons 2/- to 3/6 half; Pineapples, Qld. 6/- to 10/- trop. case; Plums, N.S.W. 3/- to 4/- half, spec. to 5/-.

Victoria.

Melbourne (29/3/34). — Prices quoted by the Wholesale Fruit Merchants' Association yesterday were as follow:—Per case: Apples, eating 2/6 to 5/-; cooking 2/- to 4/6, windfalls 1/- to 2/-. Bananas, per double case: green, 8's and 9's 17/- to 18/-, 7's 15/- to 16/-, 6's 12/- to 14/-, special higher; Grapes 3/- to 8/-, special 1/- to 2/- higher; Peaches, 3/- to 5/-, some dessert higher; Lemons 6/- to 8/-, special 9/-, Passionfruit 4/- to 7/-, special to 8/- case; Pineapples 7/- to 9/-, few best counts 10/- double case; Pears 5/- to 7/-, Tomatoes 5/- to 9/-, Portlands 7/- to 10/-, few very special 1/- to 2/- higher. Val. 8/- to 16/-, some selected higher.

The Melbourne market manager of the Federal Citrus Council of Australia reports that sales yesterday were as follow:—Val., average standard grades, full-colored, 75-112, 6/- to 9/-, some 10/- 140-168, to 12/-, pale-colored and green 1/- to 2/- lower, selected standards 13/- to 16/-, best counts, a few specially selected higher; Lemons, good standard grades, full-colored to 8/- best counts, green, part colored and plain, lower, a few specials to 9/-.

Queensland.

Brisbane (23/3/34). — Pineapples, smoothleaf 3/- to 5/- case; roughleaf 5/- to 7/-; Lemons 3/- to 8/- case, Gayndah 8/- to 10/-, Benyenda 9/- to 13/-; Passionfruit, No. 1 quality 5/- to 8/-, No. 2 quality 3/- to 4/-; Peaches 2/- to 4/- half bush. case; Pears, Stanthorpe 4/- to 7/-; Figs 1/6 to 2/- tray; Grapes, Stanthorpe, Muscat 4/- to 4/6, odd sales 5/-, Black Prince 2/6 to 3/6, white 2/- to 3/-, W. Cross 5/- to 6/-, other choice varieties 6/- to 7/-; Gros Colman 1/6 to 2/6, a few 3/-; Apples: Dunns 3/- to 4/6, G. Smith 5/- to 7/- bush.; Jon. and Del. small 4/- to 4/6, medium 5/- to 6/6, other varieties 3/- to 5/-; Quinces 2/- to 3/6 bush.; Imported fruit: Oranges, Vals. 7/- to 15/-; Lemons 4/- to 10/-; Pears, Vic'n B.D.C. 6/- to 8/6, W.B.C. 9/- to 11/-; W.C. 9/- to 11/-, small 6/- to 7/-; Vic. Apples 3/- to 6/-; Plums 4/- to 6/-.

Cable Address: DAVIS, MELBOURNE. Code: "ABC," 4th and 5th Editions. Box, G.P.O. 148B.

J. DAVIS PTY. LTD., *Fruit Merchants*

8 WHOLESALE FRUIT MARKET

Consignments solicited. One Trial Invited. Best Prices obtained. Prompt Advice and Payment.
Telephone, F 3232. Bankers: The National Bank of Australasia, 271 Collins Street, Melbourne.

Silbert, Sharp & Davies Pty. Ltd.
Fruit Merchants and Commission Agents
17 Wholesale Fruit Market
'Phone: F 2287.

G. Lister Pty. Ltd.
WHOLESALE FRUIT SALESMEN
12 Wholesale Fruit Market
Bankers: Commercial Banking Co. of Sydney
For Reference: ASK ANYONE

A. Millis & Sons
34 Wholesale Fruit Market
EXPORTERS AND IMPORTERS
Specialty—Prompt Returns. Cheques every Wednesday. 'Phone, F 1862.

N. N. McLEAN PTY. LTD.
60 Wholesale Fruit Market
Growers Agents and Exporters
Manufacturers of "PLANE" Brand Chemical Dusts.

G. Woolf
29-30 Wholesale Fruit Market
WHOLESALE FRUIT MERCHANT & COMMISSION AGENT
Telephone F 5550.

Bell, Banson Pty. Ltd.
Wholesale Fruit Merchants,
20 WHOLESALE FRUIT MARKET, MELB.
CONSIGNMENTS OF FRUIT AND VEGETABLES SOLICITED.
Telephone: F1023; Private JW2528.
Bankers: E.S. & A. Bank, Market Branch.

T. Stott & Sons *FRUIT MERCHANTS* ESTABLISHED 1882.
26 Wholesale Fruit Market, Melbourne. And at VICTORIA MARKETS.
COUNTRY AND INTERSTATE ORDER TRADE SUPPLIED.
CONSIGNMENTS SOLICITED. PROMPT SETTLEMENTS. SHIPPING No. 41.
PHONE: F 4370. Bankers: Bank of Australasia, Melbourne.

F. CAVE & CO. Pty. Ltd. PHONE: F 3930 Telegrams "CAVECOFRUT"
F. CAVE, Managing Director
Wholesale Fruit Merchants and Commission Agents — Exporters of Fresh Fruit
9 WHOLESALE FRUIT MARKET
Bankers: National Bank Western Branch, Melb. | CONSIGNMENTS SOLICITED.

J. W. Ross
13 Wholesale Fruit Market
WHOLESALE FRUIT MERCHANT
Prompt Returns and Sale Notes Daily.
Tel., F 2426.

Box 417 G.P.O.
J. H. Young & Co. Pty. Ltd. Phone F 2098
(R. GORDON, MANAGING DIRECTOR)
GROWERS AGENTS
32 Wholesale Fruit Market MELBOURNE
Bankers: E. S. and A. Bank William Street, Melbourne.
HIGHEST PRICES and PROMPT RETURNS
SHIPPING NO. 48 **"WE STRIVE TO PLEASE"**

Tim Young & Co. Pty. Ltd.

WHOLESALE FRUIT MERCHANTS

18 Wholesale Fruit Market

Growers can be assured of receiving the very best service and prompt returns,

Cable Address "TIYOUNG"

A.B.C. Code, 5th Edition.
Box 28a G.P.O., Melbourne.

TELEPHONE, **F 4321**

Bankers:
E. S. & A. Bank Ltd.,
Melbourne—225 Swanston Street.

Stencil or Labels on application.

CONSIGN YOUR FRUIT TO

R. A. Wing & Co.

WHOLESALE FRUIT AND PRODUCE COMMISSION AGENTS,
No. 37 Wholesale Fruit Market, Melbourne.
Branches 141 Little Bourke Street and Victoria Market.
TELEPHONE: F 1744.

CONSIGNMENTS OF FRUIT AND VEGETABLES

Assured Highest Market Rates.

P. A. Patrikeos

26 Wholesale Fruit Market
Melbourne

Telephone: F 2227.

H. M. WADE & CO.

Fruit Commission Agents

No. 21 Wholesale Fruit Market, Melbourne

Prompt Advices and Account Sales

Phone: F 4866

A. E. PITT

Member of Wholesale Fruit Merchants' Association of Vic.
Established 1893.
14 WHOLESALE FRUIT MARKET, MELBOURNE.
Consignments Solicited from all States.
Growers Will Receive Top Market Value and Prompt Returns
Fidelity Bond Guarantee for £1,000.
Reference—E.S. & A. Bank, Elizabeth St. Branch, Melbourne.
Phone: F 5035.

H. LOUEY PANG & CO. PTY. LTD.

FRUIT, PRODUCE & COMMISSION AGENTS

No. 4 WHOLESALE FRUIT MARKET, MELBOURNE

(Also at 172 Little Bourke Street) G.P.O. Box No. 795, Melbourne.
References—E. S. & A. Bank, 225 Swanston St., Melbourne.

GOOD PRICES ASSURED

Cheques Sent Daily—Immediately Consignment is Sold.

H. & S. FRANKEL

(Established 35 Years)
No. 44, WHOLESALE FRUIT MARKET, MELBOURNE.
Growers in all States are invited to send consignments. Highest market rates and prompt settlements.
Telephone: Store F4874;
Bankers: Private F1555 & F8711.
Commonwealth Bank of Australia.
£500 Fidelity Bond Guarantee.

P.O. Box 1509N. Fidelity Bond Guarantee £1,000 Telephone: F 3252

WING YOUNG & CO.

Wholesale Fruit and Banana Merchants

Cables & Telegrams:
"WINDISET," Hong Kong.
"WINGYOUNG," Melbourne.
Reliable Advice and Service.

Branches at
HONG KONG & KONGMOON
Trial Shipments Solicited.

Bankers:
E.S. & A. Bank,
Melbourne and Adelaide.
Highest Prices and Prompt Returns

38 Wholesale Fruit Market, Melbourne and 243 Franklin Street,

---

FRUIT BUYERS

LEMONS, ORANGES, GRAPEFRUIT, PEARS, PEACHES, APRICOTS, BERRIES, CHERRIES.

—o—

BROOKE'S LEMOS LTD.

69-79 WHITEMAN STREET, MELBOURNE SOUTH, S.C.5.
— Telephone, M 3141. —

PATENTS

GEORGE A. U'REN
PATENT ATTORNEY
"HEATY HOUSE," 499 LITTLE COLLINS ST MELBOURNE.

"Fruit World Annual"

Comprehensive review of Australian and New Zealand fruit industry.

"The Fruit World," Box 1944 G.P.O., Melbourne.

West Australia.

Perth (21/3/34).—Jons. flats 3/- to 5/-, dumps 4/- to 9/- (others from 3/-); Dunns 3/- to 5/-, R. Beauty 3/6 to 4/6, G. Smith 3/- to 4/6, 4/6 to 7/9; Cleos. 2/6 to 4/-, 3/- to 6/-; Del. 5/6 to 6/6; Citrus: Vals. flats 3/- to 8/-, dumps 7/- to 11/6 (special to 13/-, inferior from 4/-); Lemons, flats 2/6 to 7/-, dumps 5/- to 10/9; Stone Fruit: Plums 7/- to 13/6 (special to 16/-, others from 6/-); Peaches 3/- to 7/6 (special to 8/9, others from 2/6); Pears, Bartlett, flats, 3/6 to 8/-, dumps 7/- to 9/6 (special to 10/-, inferior from 4/-); other varieties, flats 2/- to 4/6 (special to 5/-), dumps 4/- to 7/-; Grapes, open, white 3/- to 7/9, closed 2/6 to 3/- colored 3/- to 7/-; Passionfruit 4/- to 12/6; dumps 4/- to 13/9 (special to 14/-, others from 2/6).

AUSTRALIAN FRUIT IN U.K.

The High Commissioner in Great Britain cabled to the Dept. of Commerce, Melbourne, on March 14:—

"Fresh fruit 'Mongolia.' Pears very satisfactory condition: good quality, equal to best African now competing. Plums appear generally sound, but some lots show frost."

The whole of the fruit in question (8,338 cases of Pears and 620 half cases of Plums) was shipped from Victoria.

Do not run any Financial Risk with your Fruit but Consign it to

HEDLEY GEEVES PTY. LIMITED

Telegraphic Address: "Apples, Brisbane." (Hedley Geeves, Managing Director) Registered Shipping No. 6.

FRUIT EXCHANGE—BRISBANE

SELECTED AGENTS FOR:
Victoria: Harcourt Fruitgrowers' Progress Assn. Ltd.
Harcourt Fruit Supply Co. Ltd.
Victorian Central Citrus Assn. Ltd.
Tasmania: State Fruit Advisory Board.
New South Wales: Griffith Producers' Co-op. Co. Ltd.
Batlow Packing House Co-op. Soc. Ltd.

Highest Prices. Prompt Returns.

A. S. BARR

FRUIT EXCHANGE, BRISBANE.
QUEENSLAND.

Wholesale Fruit Merchant and Growers' Agent.

A Trial Solicited. Returns Speak for Themselves.
Established 1888. Shipping No. 19.

ROBSONS LIMITED
(Wm. Robson, Managing Director)

Guarantee satisfaction to Clients. Send us a trial consignment.

FRUIT EXCHANGE, BRISBANE, Qld.

Account Sales and Cheques sent promptly.
Shipping No. 28.

Get New Ideas

Better Fruit Magazine

Is the business publication of the prosperous Pacific North-west fruit industry. Twenty-seven years of worthwhile service has gained the confidence of its readers as few publications ever do.

Practically every new method and appliance used by the apple industry was originated and developed here. Keep posted on events and learn of profitable new ideas that will increase your income.

Subscription price, $2.00
— a year, post paid. —
SAMPLE COPIES FREE.

BETTER FRUIT PUBLISHING COMPANY

Portland, Oregon, U.S.A.

Best Efforts for Good Returns.

Jacklyn & Jacklyn

Fruit Exchange, Brisbane
Queensland

Wholesale Fruit Merchants & Growers' Agents

J. H. Jacklyn, Sen., has had 40 years' experience in the fruit trade.

A Trial Solicited. Shipping No. 36.

NORTHWEST FRUIT GROWER

"The Authoritative Magazine of the Deciduous Fruit Industry"

Published in Wenatchee, Washington, "the Apple Capital of the World."

Latest and most authentic information on Spraying, Fertilising, Fruit Cleaning, and all other phases of productive fruit growing.

Subscription Rates—Foreign, 3 dollars per year; 5 dollars for two years.

Northwest Fruit Grower

132 So. Mission St., Wenatchee, Washington, U.S.A.

London (16/3/34). — First arrivals New Zealand, yesterday: Small parcel Cox's realised 33/- Southampton, 30/- in London; slight bitter pit. Worcesters good color and quality 13/-, 14/-. Gravensteins immature, 10/-, 12/-.

London, 27/3/34.—The condition of the "Themistocles'" S. Aust. William Pears on the average was good, but irregular. Two thousand three-quarter cases consigned to the S. Aust. Trade Commissioner realised 10/- to 14/- per case.

Mr. J. Cooksley, of the Brisbane Fruit Markets, who recently visited the Harcourt district, Victoria, said that the growers should pay special attention to the removal of arsenic from their fruit as the inspectors were examining the fruit very carfully in Queensland.

VICTORIAN FRUIT EXPORT.

The Victorian Department of Agriculture advise total shipments to March 24, 1934, as follows: — London, 187,477 cases Apples, 122,964 pkgs. Pears, 6,216 pkgs. Plums; Hull, 60,562 Apples; Liverpool, 51,580 Apples; Glasgow, 24,332 Apples; Hamburg, 56,033 Apples; Bremen, 6,186 Apples; Rotterdam, 35,950 Apples.

Total Shipments: 422,120 cases Apples; 122,964 packages Pears, and 6,126 packages Plums.

Seasonable Orchard Practice.

Spraying of Stone Fruits.

It is advisable that stone-fruit trees be sprayed in autumn with a 5-4-50 Bordeaux spray for the better control of brown-rot, leaf-curl, die-back, etc. (states the "N.Z. Journal of Agriculture"). Before doing so, however, the trees should be carefully examined, and all cankered and infected shoots, laterals, mummified fruits, and branches removed and destroyed by burning.

This should be looked upon as a very important work, for it is a well-known fact that many of the fungus diseases overwinter by means of hibernating mycelium in cankers on laterals and branches, conidia lodged in bud scales and in infected shoots, and spores in mummified fruit lying on the ground and hanging on the tree.

It is also advisable at this time to remove surplus growth inside vigorous and congested stone-fruit trees, with the object of opening up the trees so as to enable the buds to ripen and the wood to harden for next year's crop.

Drainage.

The importance of adequate drainage cannot be overstressed; the natural trend of an open drain, if not cleaned out to the original depth each year, is to gradually fill up, and in this way the level of the underground water is raised. Where this occurs an unfavorable subsoil condition is set up, which is subsequently reflected in the general health of the fruit trees. The outlet drain, which is usually an open one, should be done first, and care taken to clean it out to its original depth, or, better still, deepen it if at all possible. Where this is done the lateral drains, whether tiled or otherwise, if carefully laid with a decided fall to the outlet, will function perfectly. If the original drainage scheme is at all faulty or inadequate, immediate steps should be taken to remedy the fault or lay new drains.

VICTORIA.

Merrigum.—There was a short-lived strike of about 80 casual fruit pickers on the orchard of Mr. W. J. Foster, in mid-March. The men demanded pay at the rate of time-and-half for working on Labor Day (previously called Eight Hours Day), Monday, March 19. Mr. Foster resisted the demand. The permanent hands were prevented from working, the strikers picketing and threatening violence against anyone harvesting. Police from Kyabram and Tatura tactfully handled the strikers, and with the departure of about fifty men, including the ringleaders, work, with new men, was resumed on Tuesday.

SPECIAL NOTICE TO FRUITGROWERS

All Members under Fidelity Bond

In response to numerous requests from growers for information as to who are members of the

Wholesale Fruit Merchants' Association of Victoria

the following list is given. All are members of the above Association, and are registered firms carrying on business in the

WHOLESALE FRUIT MARKET, MELBOURNE.

STAND NUMBERS ARE AS INDICATED IN PARENTHESIS.

T. STOTT & SONS (26).
H. L. E. LOVETT & CO. (23).
A. E. PITT (14).
J. DAVIS PTY. LTD. (8).
W. S. TONG (31).
SILK BROS. PTY. LTD. (24-25).
J. G. MUMFORD (35).
GOLDEN VALLEY FRUIT CO. PTY. LTD. (15).
J. W. ROSS (13).
J. H. YOUNG & CO. PTY. LTD. (32).
H. M. WADE & CO. (21).
DAVID SMITH PTY. LTD. (3).
SILBERT, SHARP & DAVIES PTY. LTD. (17)
W. A. WATKINS (5).
P. A. PATRIKEOS (36).
G. WOOLF & SONS (29-30).
F. CAVE & CO. PTY. LTD. (9).
R. CORNISH & SONS (5).
J. HYMAN & SON (51).
HERBERT WILSON PTY. LTD. (10).
FRANK BOOTH & SONS PTY. LTD. (16).
GEO. LISTER PTY. LTD. (12).
TIM YOUNG & CO. PTY. LTD. (18).

GROWERS PROTECT YOURSELVES by consigning to members of the WHOLESALE FRUIT MERCHANTS' ASSOCIATION OF VICTORIA.

J. D. FRASER, Secretary, 21 Wholesale Fruit Market, Queen Street, Melbourne. Phone F 4866.

Correspondence is invited by the Association.

Successful frost prevention with crude oil at the orchard of Mr. W. Eagle, Harcourt, Vic.

For further details see January "Fruit World."

SELLING FRUIT BY COUNT.

Reform Needed in Victoria.

LAST SEASON an effort was made by the Apple Publicity Committee to have Apples, Pears and other large fruits sold by number instead of by weight.

The effort was partially successful, about 50 per cent. of the retailers adopted the system. But there were insufficient funds to punch the advantage home.

But many retailers who started to sell by ccunt have reverted to selling by weight. Why? Not because they prefer selling by weight. That is an old fashioned and cumbersome method. No! It is because effort to secure the needed reform had not the finance nor the organisation to finish the job.

It seems so foolish to see retailers who sell Oranges, Bananas, and even Passionfruit by numbers, submitting to the time wasting and fruit damaging method of selling other fruits—Apples, Pears, Peaches, etc., by weight.

Everyone admits the desirability of the reform. Growers can provide the necessary effort to bring it about.

EXPORT OF CITRUS FRUIT.

Control Proposals Not Favored.

AFTER hearing the report on citrus export by Mr. J. S. Vagg, after his return from England, the Federal Citrus Council passed a resolution urging Federal legislation to establish a stabilisation fund, and pending the passage of the legislation, the Government be asked to provide a guarantee to ensure a nett return to the grower of 3/9 per export box. In the event exceeding the guaranteed minimum, half the excess to go to the growers and half to the Government to liquidate the guarantee fund, any surplus to be distributed at the end of the season.

Meetings of growers at Mangrove Mountain and Dooralong, carried resolutions unanimously favoring the proposals.

At Ourimbah and Gosford a majority of growers voted against the proposals.

The Lisarow Branch of the Fruitgrowers' Federation of N.S.W. has formed a defence committee to oppose the Citrus Equalisation Committee for the imposition of a case levy to support export and recoup the producer of inferior fruit.

A large meeting at Griffith rejected by an overwhelming majority the Federal Citrus Council's recommendation.

Gold Reef in Orchard. — A valuable gold reef was recently unearthed in Mr. David Christesen's Apple orchard at Baarmutha, Victoria. A trial crushing of 20 tons gave a yield of 26 oz. of gold.

Elphinstone.—The quality of the fruit in this district is excellent. There was much activity during February and March with the export trade.

Macedon.—In the fruit section of the Macedon autumn show the awards were as follow:—Dessert Apples: C. Grumont. Cooking Apples: N. Melvane. Damsons: E. Rutherford. Plums: E. Scott. Plums (Dark): L. Barlow. Peaches: Mrs. Wiltshire.

SUPPORT CO-OPERATION

By Consigning your FRUIT to the

Producers' Distributing Society Ltd.

(Late Coastal Farmers' Co-operative Society Ltd.)

Agents for

"BLACK LEAF 40"

and all Orchard Requirements

Melbourne Sydney
Newcastle Devonport

Cooksley & Co.

(W. P. COOKSLEY)

Reliable Fruit Agents

Over 50 Years Experience

TRY THEM!

Telegraphic Address: "COOKSLEYS," BRISBANE

Fruit Exchange, Brisbane

QUEENSLAND

Shipping No. 29

Reference: Commercial Banking Co. of Sydney Ltd.

Australasian POULTRY WORLD

ALL NEWSAGENTS

6d. Per Copy 6/- Per Annum

Ship Your Oranges, Lemons, Grapes to New Zealand

All consignments for this market will have careful attention and realise highest prices if sent to

The Co-operative Fruitgrowers of Otago Limited, Dunedin

Personal supervision of every consignment.

Cheques posted promptly.

Drop us a Line or Cable: "Peachbloom," Dunedin.